Working with Filters

Stratum.Viewer 7

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- View Filter

Getting Started

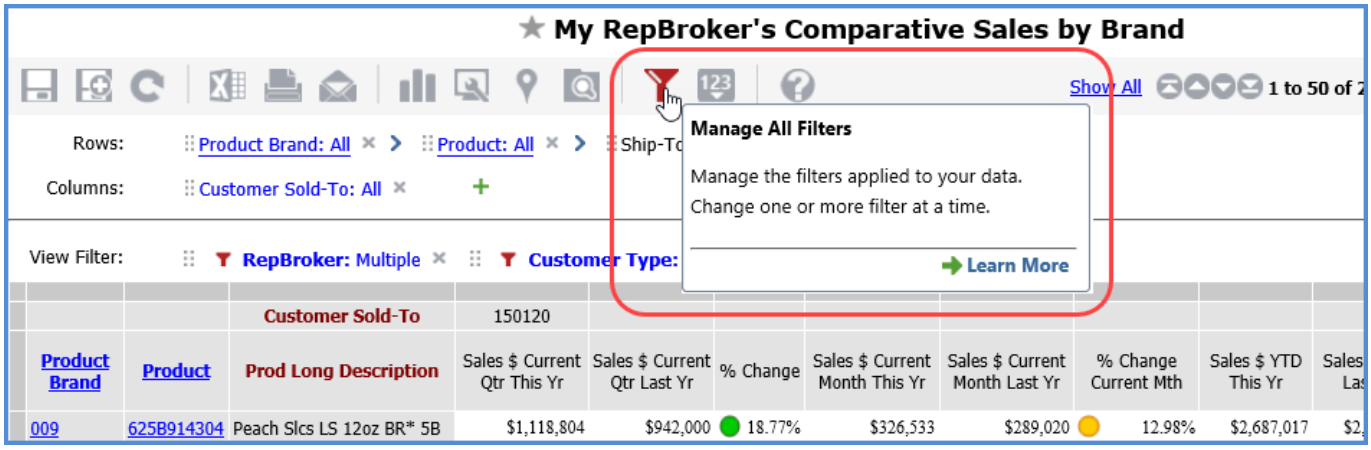
Access to Filtering

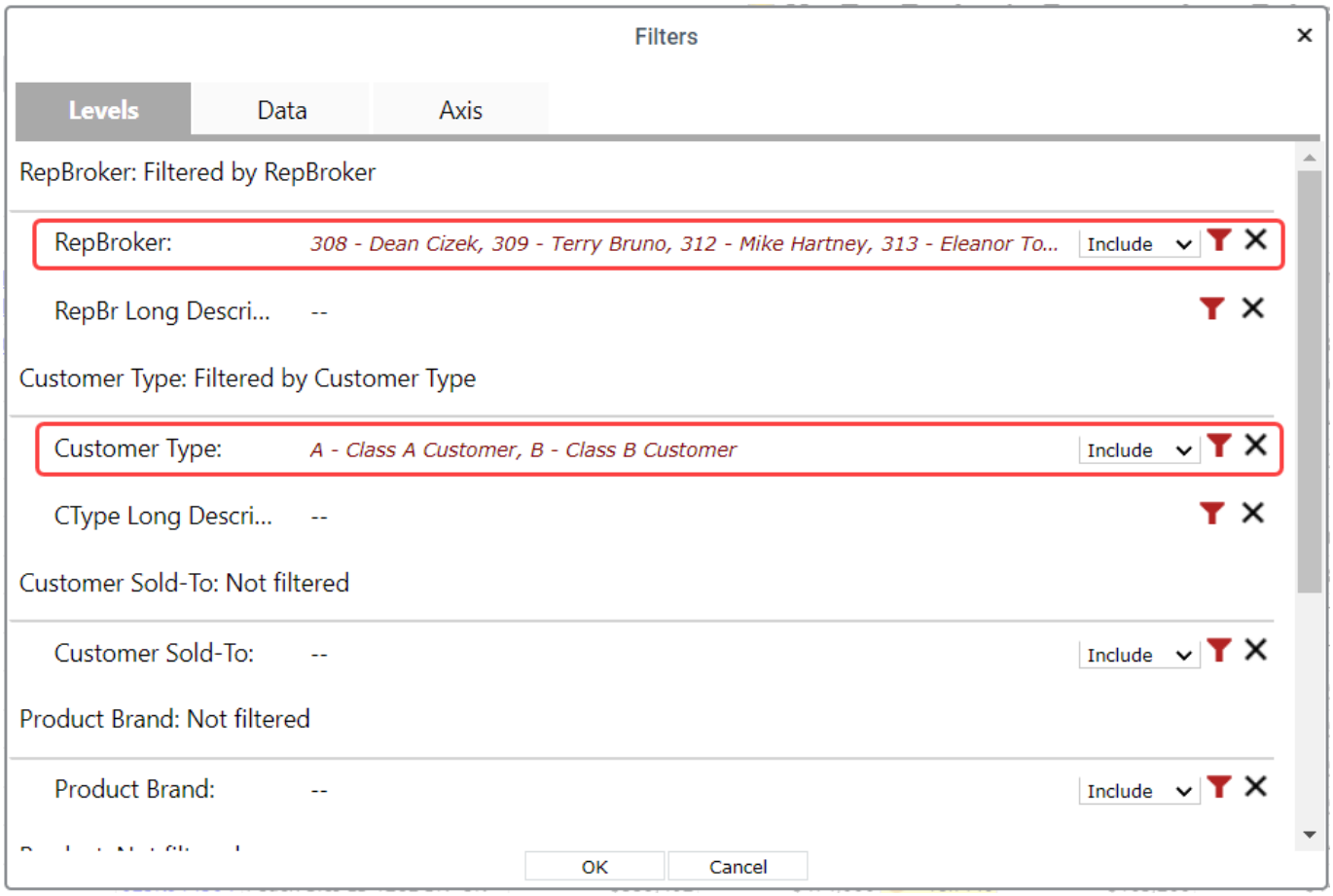
Filtering functionality is available to all users – you can add, edit, and remove all types of filters using the Filters window. You can also click the filter cue ▼ next to a filtered item in the grid to edit that specific filter.

Introduction to Filtering

Filtering is a way of focusing on the data that is most important to you. Filters can be associated with levels, attribute relationships, measure items, totals, the overall view, and rows and columns. You can combine filters with sorts to achieve a view of data that best suits your business needs. A filter cue ▼ displays next to an item when a filter has been applied. Click on that filter cue to review, edit, or clear the applied filter.

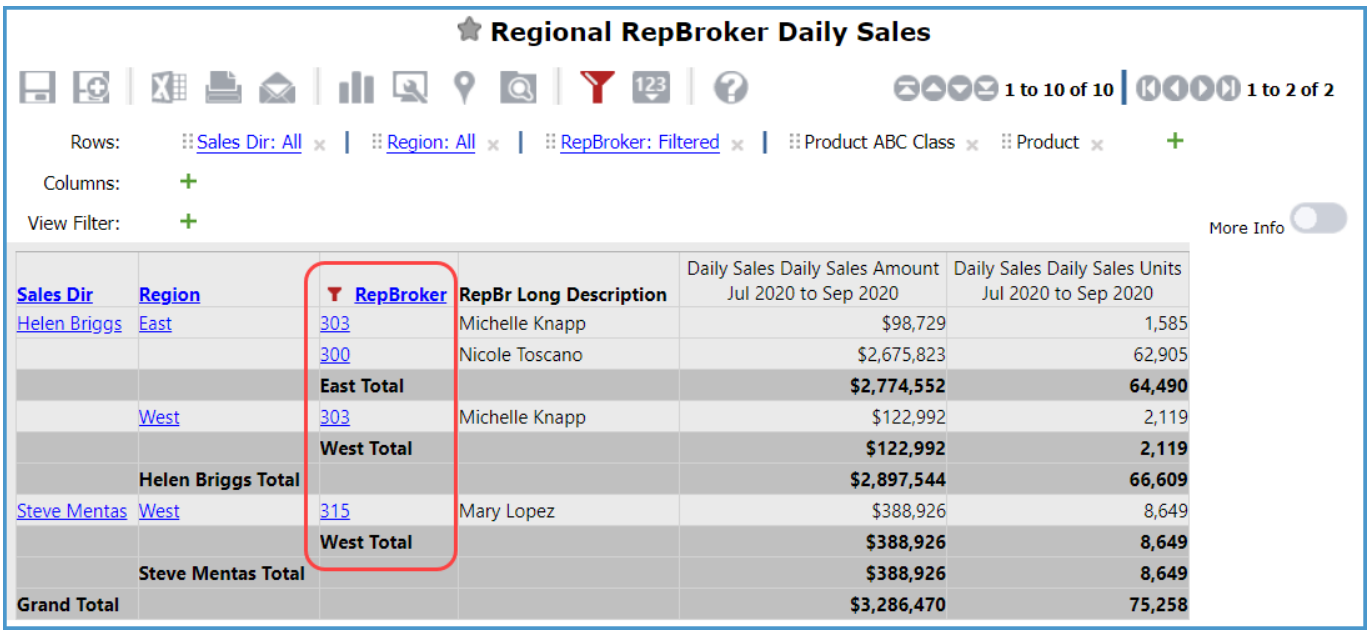
You also can add and manage multiple types of filters from the Filters window, which is accessed from the Manage All Filters icon in a view. When filters exist in a view, that icon displays as red as a hint that filters exist.



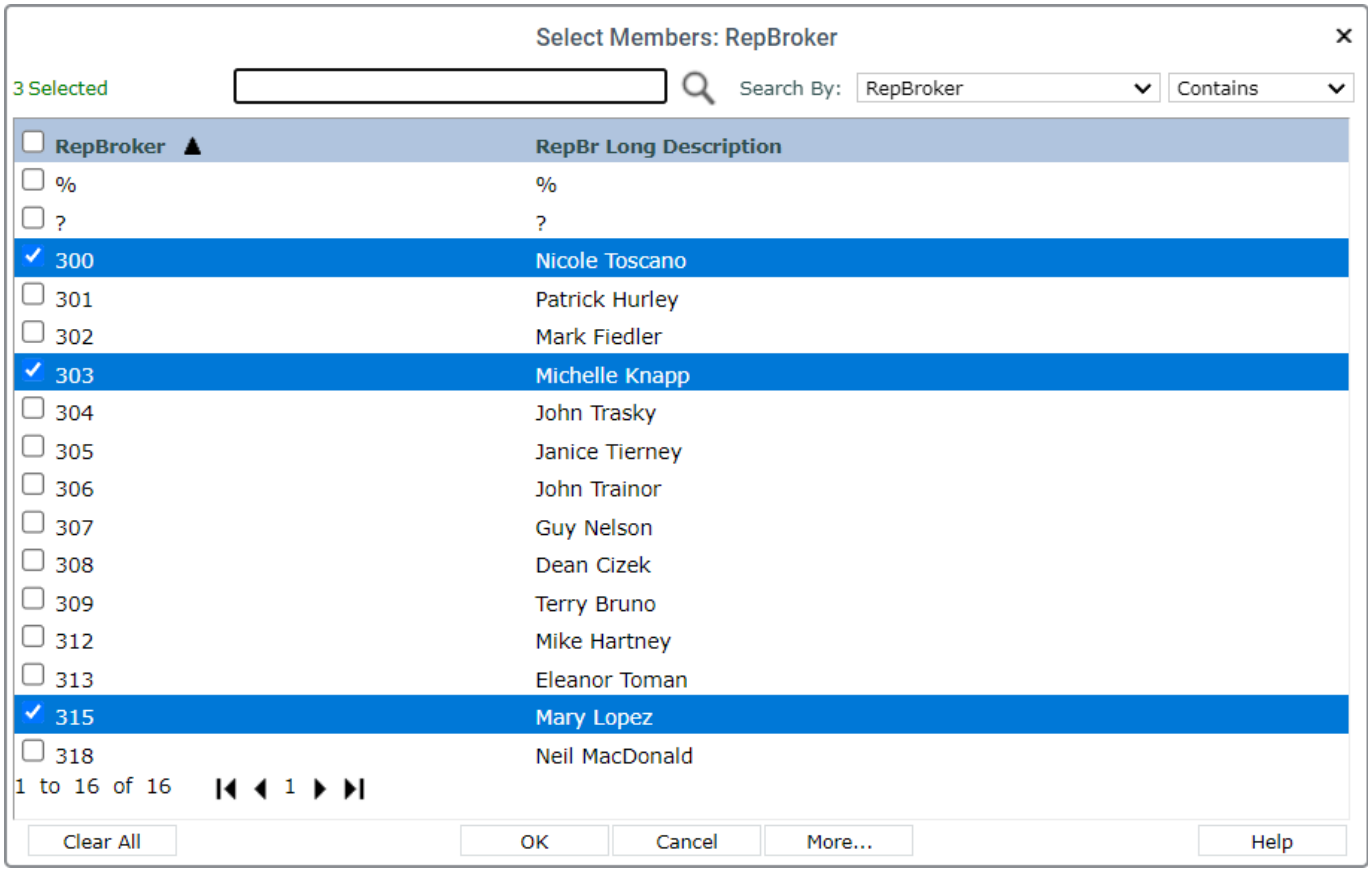


Level Filter

You can filter levels using members, user lists, named sets, and expressions. For example, you have a view listing RepBrokers and you want to only see three. You apply the member filter shown below, which has three members selected for it and a Filter Mode of Include. If you wanted to see all RepBrokers **except** those three, a quick change of the Filter Mode for that level from Include to Exclude would return the desired results.



Sales Dir	Region	RepBroker	RepBr Long Description	Daily Sales Daily Sales Amount Jul 2020 to Sep 2020	Daily Sales Daily Sales Units Jul 2020 to Sep 2020
Helen Briggs	East	303	Michelle Knapp	$98,729	1,585
		300	Nicole Toscano	$2,675,823	62,905
		East Total		**$2,774,552**	**64,490**
	West	303	Michelle Knapp	$122,992	2,119
		West Total		**$122,992**	**2,119**
	Helen Briggs Total			**$2,897,544**	**66,609**
Steve Mentas	West	315	Mary Lopez	$388,926	8,649
		West Total		**$388,926**	**8,649**
	Steve Mentas Total			**$388,926**	**8,649**
Grand Total				**$3,286,470**	**75,258**



Here is the level in the Filters window showing the Include setting.

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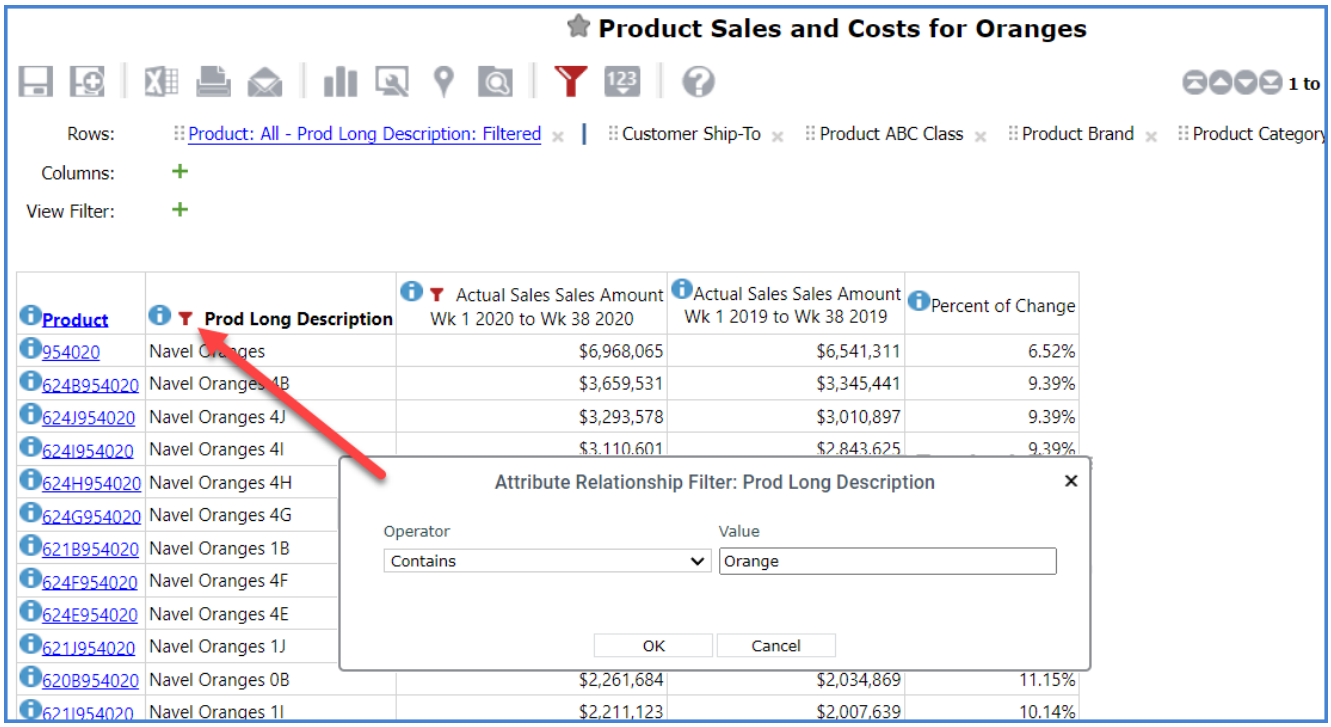
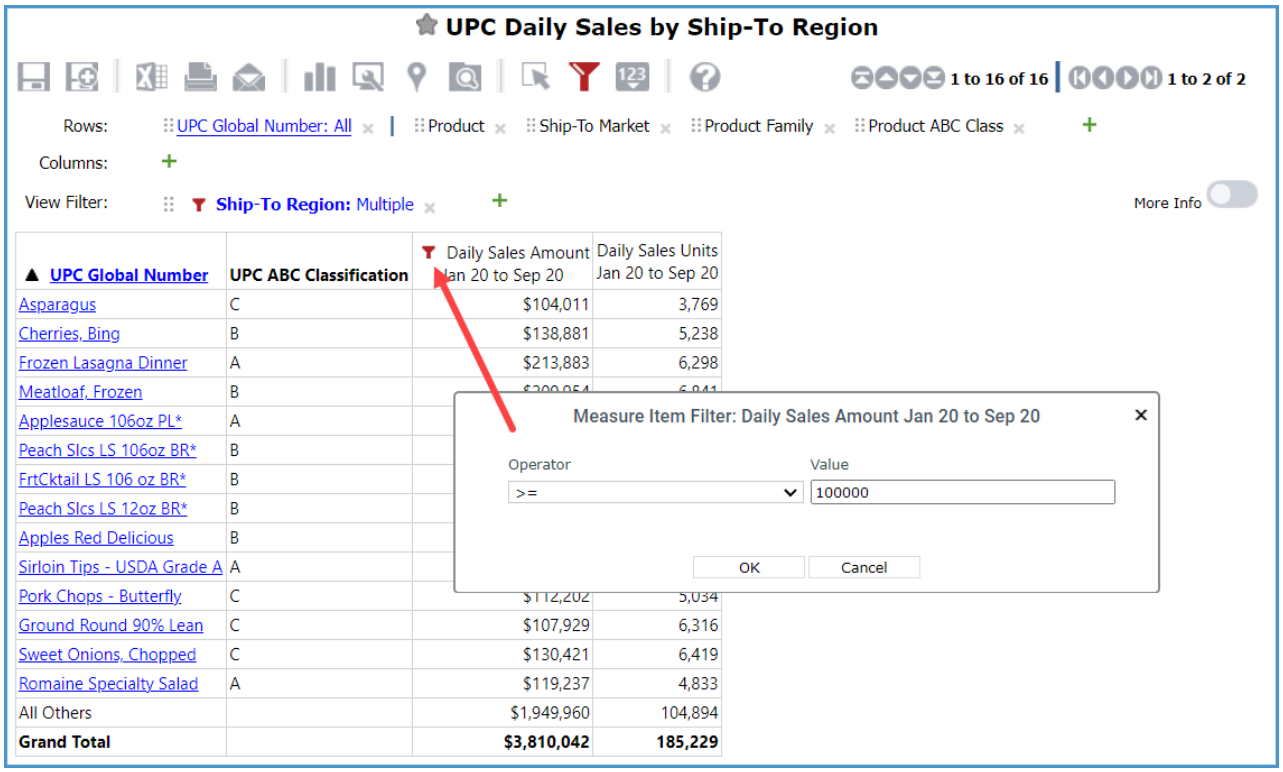
Attribute Relationship Filter

You can filter individual attribute relationships by selecting a filter operator and value. For example, you may want to filter for certain Products based on text in their descriptions. The following filter returns products that contain the text “Orange” in their Prod Long Description.



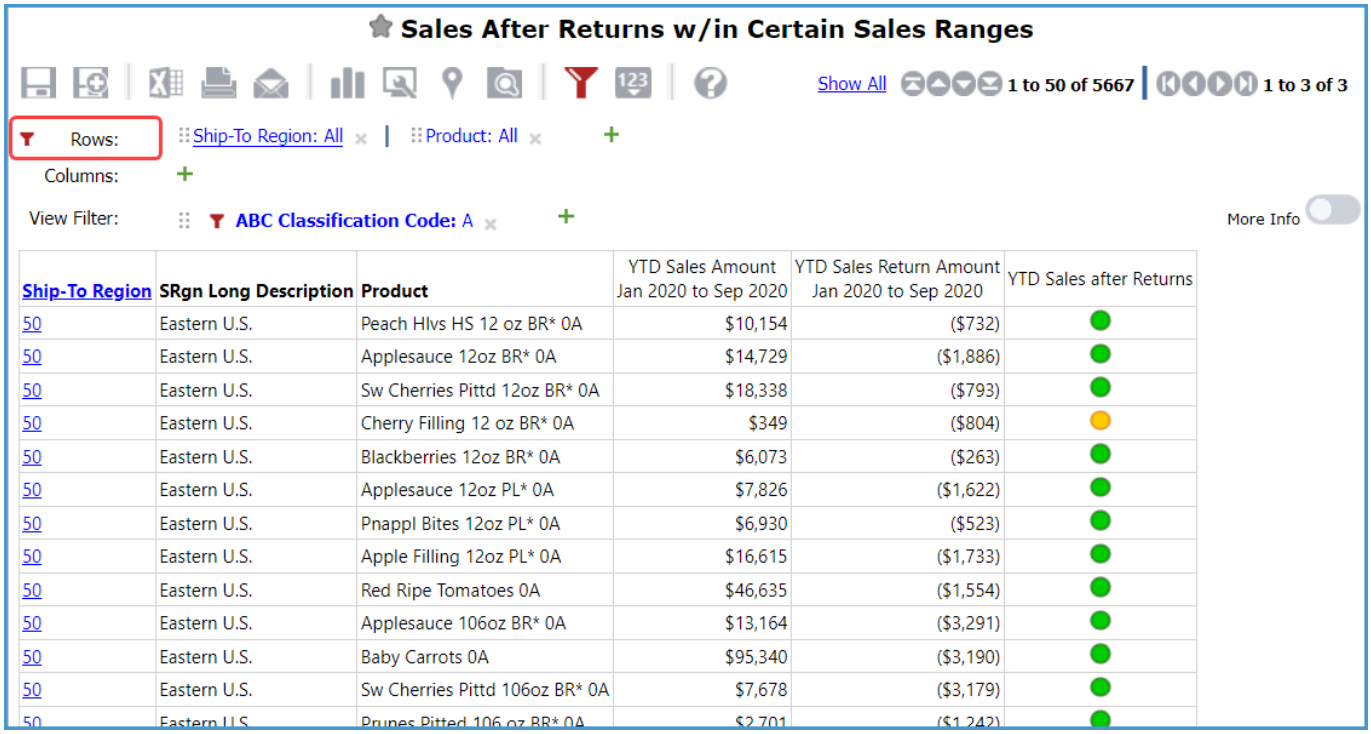
Measure Item Filter

You can filter individual measure items by selecting a filter operator and value. For example, you may have a Daily Sales Amount measure item but only want to include amounts greater than or equal to $100,000. You would select the Daily Sales Amount measure and apply a filter of >=100000.

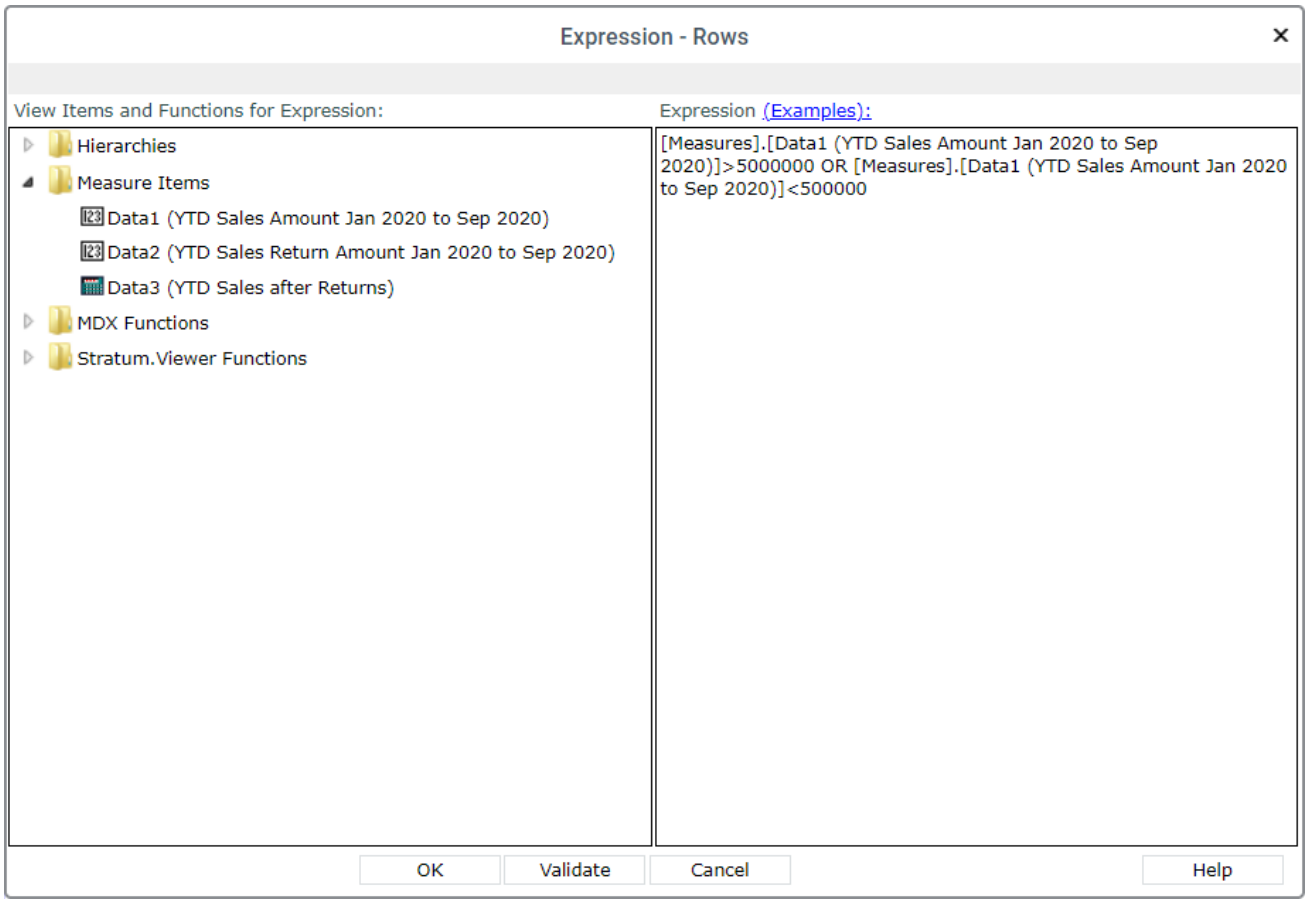


Axis Filter

You can filter the row or column axis. Use this type of filter when you need to create a complex filter such as applying multiple filter criteria on a single item or filtering on multiple items in the view using an OR condition. The following example uses an axis filter on rows to show us only the products with YTD Sales Amount greater than $5,000,000 OR less than $500,000.

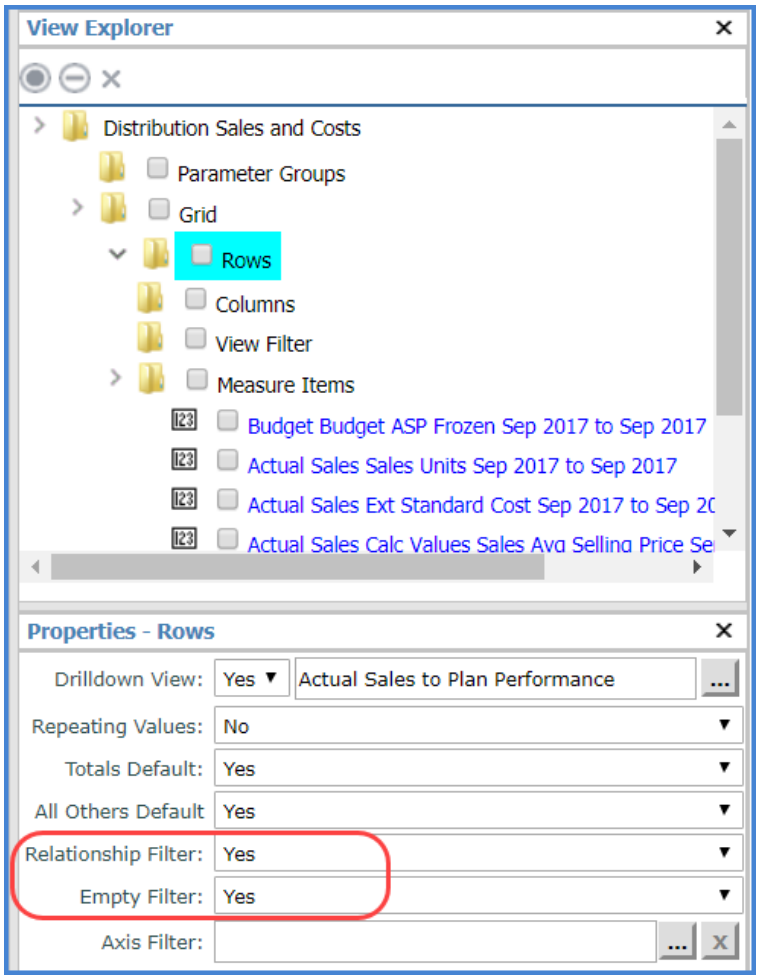


Ship-To Region	SRgn Long Description	Product	YTD Sales Amount Jan 2020 to Sep 2020	YTD Sales Return Amount Jan 2020 to Sep 2020	YTD Sales after Returns
50	Eastern U.S.	Peach Hlvs HS 12 oz BR* 0A	$10,154	($732)	
50	Eastern U.S.	Applesauce 12oz BR* 0A	$14,729	($1,886)	
50	Eastern U.S.	Sw Cherries Pittd 12oz BR* 0A	$18,338	($793)	
50	Eastern U.S.	Cherry Filling 12 oz BR* 0A	$349	($804)	
50	Eastern U.S.	Blackberries 12oz BR* 0A	$6,073	($263)	
50	Eastern U.S.	Applesauce 12oz PL* 0A	$7,826	($1,622)	
50	Eastern U.S.	Pnappl Bites 12oz PL* 0A	$6,930	($523)	
50	Eastern U.S.	Apple Filling 12oz PL* 0A	$16,615	($1,733)	
50	Eastern U.S.	Red Ripe Tomatoes 0A	$46,635	($1,554)	
50	Eastern U.S.	Applesauce 106oz BR* 0A	$13,164	($3,291)	
50	Eastern U.S.	Baby Carrots 0A	$95,340	($3,190)	
50	Eastern U.S.	Sw Cherries Pittd 106oz BR* 0A	$7,678	($3,179)	
50	Eastern U.S.	Prunes Pitted 106 oz BR* 0A	$2,701	($1,242)	



Relationship and Empty Filter

You can filter rows and columns through their Relationship and Empty Filter properties. That type of filtering takes into consideration the existence of data or lack of data in the database given the levels and measure items for the view.



View Filter

You can filter an overall view in relation to members of a particular level through the View Filter section. The data returned in the rest of the view will be just the data relevant to members specified by the View Filter. For example, you have a view listing Lot data, but you want to filter to include only Lot data pertaining to A products. You add the Product ABC Class level to the View Filter section and filter it by A products.

Lot	Daily Sales Daily Sales Amount Sep 2016 to Sep 2016			Daily Sales Daily Sales Amount Jan 2016 to Sep 2016	Daily Sales Daily Sales Amount Jan 2017 to Sep 2017	Variance YTD 2016 vs 2017
19994538954018	$53,078	$59,783	$6,705	$141,753	$166,887	$25,134
19994740954018	$52,773	$59,439	$6,666	$140,938	$165,927	$24,990
19994437954018	$52,207	$58,802	$6,595	$139,427	$164,149	$24,722
19994336954018	$50,195	$56,536	$6,340	$134,053	$157,822	$23,769
19994639954018	$44,457	$50,073	$5,616	$118,729	$139,781	$21,052
19994437954006	$31,032	$34,952	$3,920	$82,875	$97,570	$14,695
19994639954006	$28,117	$31,668	$3,552	$75,090	$88,404	$13,314
19994740954006	$27,975	$31,508	$3,534	$74,710	$87,957	$13,247
19994538954006	$27,727	$31,229	$3,502	$74,049	$87,178	$13,130
19994336954006	$24,479	$27,572	$3,092	$65,376	$76,967	$11,592
19994639954012	$24,247	$27,310	$3,063	$64,756	$76,238	$11,482
19994740954012	$23,365	$26,316	$2,951	$62,399	$73,463	$11,064

Tasks - Adding

Apply a Filter to Attribute Relationships

Before following the steps below, make sure the attribute relationship that you want to filter a level by is visible in the view. Then proceed with the steps below.

Note: Filter options also are available from an item's right-click menu in the grid (choose Filter then Edit). The steps shown here are useful for setting up filters on multiple items and applying all your changes at once.

1. Click the Manage All Filters icon in the grid toolbar to access the Filters window.

2. In the Levels tab of the Filters window, look for the attribute relationship in the section for its level. Then, click the Change Filter icon next to the attribute relationship's name.

3. Select the filter operator and enter a filter value in the Attribute Relationship Filter window. Then click OK.

4. To apply filters to additional attribute relationships, repeat steps 2 and 3 for each one. When you are done in the Filters window, click OK.

Apply a Filter to Levels

1. Click the Manage All Filters icon in the grid toolbar to access the Filters window.

Note: Filter options also are available from an item's right-click menu in the grid (choose Filter then Edit). The steps shown here are useful for setting up filters on multiple items and applying all your changes at once.

2. From the Levels tab in Filters window, click the Change Filter icon next to the level name.

3. The Select Members window for defining the filter will display. Select the members in the Select or Advanced Select Members window, then click OK.

   If you need to apply a different type of filter, click the More button and choose Change Filter Type. Then choose the filter method (User List, Named Set, Expression) from the Select Filter Method window. Use the applicable filter window that displays to set up the filter, and then click OK.

   - **User List** - select a list from the Select User List Filter window.
   - **Named Set** - select a named set from the Select Named Set Filter window.
   - **Expression** - adjust the filter expression in the Expression window.

Note: The Paste Members window is another option for identifying values for use in a member filter. The window is opened from the Paste option on the More menu in the Select or Advanced Select Members windows. See the topics "Identify Values For Filters Using The Paste Members Window" and "Potential Sources of Data for use with Pasting Members".

4. For the filter you just set up, determine if it will be treated as an Include or Exclude filter. Use the provided drop-down list next to the level's Change Filter icon. Choose "Include" to have the applied filter return only the members specified by your filter selections/criteria. Choose "Exclude" to have the applied filter return all members ***except*** the ones specified by your filter selections/criteria.

5. To apply filters to additional levels, repeat steps 2 through 4 for each one. When you are done in the Filters window, click OK.

Apply a Filter to Measure Items

1. Click the Manage All Filters icon in the grid toolbar to access the Filters window.

2. From the Data tab in the Filters window, click the Change Filter icon next to the measure item.

3. Select the filter operator and enter a filter value in the Measure Item Filter window. Then click OK.

4. To apply filters to additional measure items, repeat steps 2 through 3 above. When you are done in the Filters window, click OK.

Note: If there are levels on the same axis as measure items, you will need to initiate the filtering from the grid. Right-click the measure item in the grid and select Filter then Edit.

Apply a Filter to Totals

1. Right-click the caption of a measure item in a Grand Total row or column, and select Filter then Edit.

2. Select the filter operator and enter a filter value in the Measure Item Filter window.

3. Click OK.

Apply a Relationship or Empty Filter

1. Double-click the Rows or Columns folder in view explorer. The Rows or Columns Properties window displays.

2. Adjust the Yes and No settings for the filter that you want to set up.

Note: In order for the Empty Filter property to be set to Yes, the Relationship Filter property must be set to Yes.

Apply a View Filter

Option 1

If the level(s) that you want to use for a View Filter already exist in the view, do the following. Otherwise, see Option 2.

1. Click the Manage All Filters icon in the grid toolbar to access the Filters window. From the Levels tab in the Filters window, click the Change Filter icon next to the name of the level that will act as the View Filter.

2. The Select Members window for defining the filter will display. Select the members in the Select or Advanced Select Members window, then click OK.

   If you need to apply a different type of filter, click the More button and choose Change Filter Type, Then choose the filter method (User List, Named Set, Expression) from the Select Filter Method window. Use the applicable filter window that displays to set up the filter, and then click OK.

   - **User List** - select a list from the Select User List Filter window.
   - **Named Set** - select a named set from the Select Named Set Filter window.
   - **Expression** - adjust the filter expression in the Expression window.

Note: The Paste Members window is another option for identifying values for use in a member filter. The window is opened from the Paste option on the More menu in the Select or Advanced Select Members windows. See the topics "Identify Values For Filters Using The Paste Members Window" and "Potential Sources of Data for use with Pasting Members".

3. For the filter you just set up, determine if it will be treated as an Include or Exclude filter. Use the provided drop-down list next to the level's Change Filter icon. Choose "Include" to have the applied filter return only the members specified by your filter selections/criteria. Choose "Exclude" to have the applied filter return all members ***except*** the ones specified by your filter selections/criteria.

4. Repeat steps 2 and 3 for any other levels that will be part of the View Filter.

5. Click OK in the Filters window when you are done setting up filters on all applicable levels.

6. If the level(s) you just added a filter to were not drilled to yet in the view (not visible yet), they will be moved to the View Filter section for you automatically after you close the Filters window. Otherwise, you will need to manually drag and drop the level(s) from rows or columns to the View Filter section for the view filter to take effect.*

***Note:** A level will not act as a filter on the entire view until the level is positioned in the View Filter section. If the level that you filtered is not yet positioned in the View Filter section of the view, drag and drop it to that section from the grid, Navigation Panel, or view explorer.

Option 2

If the level(s) that you want to act as a view filter don't exist in the view yet, follow the steps below to add them to the View Filter section and then filter them.

1. In the View Filter section, click the Add Levels To View Filter icon +.

2. Use the Add Hierarchies window to add levels and click OK.

3. In the View Filter section, click the level you just added.

4. The Select Members window for defining the filter will display. Select the members in the Select or Advanced Select Members window, then click OK.

   If you need to apply a different type of filter, click the More button and choose Change Filter Type. Then choose the filter method (User List, Named Set, Expression) from the Select Filter Method window. Use the applicable filter window that displays to set up the filter, and then click OK.

   - **User List** - select a list from the Select User List Filter window.
   - **Named Set** - select a named set from the Select Named Set Filter window.
   - **Expression** - adjust the filter expression in the Expression window.

Note: The Paste Members window is another option for identifying values for use in a member filter. The window is opened from the Paste option on the More menu in the Select or Advanced Select Members windows. See the topics "Identify Values For Filters Using The Paste Members Window" and "Potential Sources of Data for use with Pasting Members".

5. For the filter you just set up, determine if it will be treated as an Include or Exclude filter. Use the provided drop-down list next to the level's Change Filter icon. Choose "Include" to have the applied filter return only the members specified by your filter selections/criteria. Choose "Exclude" to have the applied filter return all members ***except*** the ones specified by your filter selections/criteria.

6. Repeat steps 3 through 5 for each level you added to the View Filter section.

Apply an Axis Filter

1. Click the Manage All Filters icon in the grid toolbar to access the Filters window.

2. From the Filters window, click the Axis tab then the Change Filter icon next to the Rows or Columns section (whichever axis you want to filter).

3. Use the Expression window that displays to set up the expression for the filter, and then click OK.

4. Click OK in the Filters window when you are done setting up the filter.

See also: Example Expressions for Filtering an Axis and Axis Filter Behavior When Levels are on Opposite Axis.

Tasks - Editing

Change Existing Filters

Options for editing filters on different types of items follow. Use the Filters window to make your edits if you have multiple items to edit – for example, if you need to add filters to some items and remove or edit filters on other items. You can make all edit changes for levels, measure items, and a view axis from the Filters window then apply all changes at once.

Attribute Relationships Filters

1. Click the Manage All Filters icon in the grid toolbar to access the Filters window.
2. In the Levels tab of the Filters window, look for the attribute relationship in the section for its level. Then, click the Change Filter icon next to the attribute relationship's name.
3. Use the Attribute Relationship Filter window to change the filter. Then click OK.
4. Change or add other filters if needed.
5. Click OK in the Filters window when you're done with all your changes.

Note: You can also click the filter icon for an item in the grid and make changes from its filter editing window that opens. The steps above are useful when editing filters on multiple items then applying all changes at once.

Axis Filters

1. Click the Manage All Filters icon in the grid toolbar to access the Filters window.
2. From the Filters window, click the Axis tab then Change Filter icon next to the Rows or Columns section (whichever axis you want to filter).
3. Use the Expression window to edit the filter expression, and click OK.
4. Change or add other filters if needed.
5. Click OK in the Filters window when you're done with all your changes.

Note: In the Navigation Panel, clicking the filter icon next to the name of the filtered axis opens the Expression window for editing that axis filter.

Level Filters

1. Click the Manage All Filters icon in the grid toolbar to access the Filters window.
2. From the Levels tab in the Filters window, click the Change Filter icon next to the level name.
3. The appropriate window for editing the filter will display depending on the filter type (member, named set, expression, user list).
    - **Member List** - adjust the members in the Select or Advanced Select Members window, then click OK.

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- **User List** - select a list from the Select User List Filter window, then click OK.
- **Named Set** - select a named set from the Select Named Set Filter window, then click OK.
- **Expression** - adjust the filter expression in the Expression window, then click OK.

4. To change the filter mode, use the provided drop-down list next to the level's Change Filter icon. Choose "Include" to have the applied filter return only the members specified by your filter selections/criteria. Choose "Exclude" to have the applied filter return all members ***except*** the ones specified by your filter selections/criteria.

5. Change or add other filters if needed.

6. Click OK in the Filters window when you're done with all your changes.

Note: You can also click the filter icon for an item in the grid and make changes from its filter editing window that opens. The steps above are useful when editing filters on multiple items then applying all changes at once.

Measure Item Filters

1. Click the Manage All Filters icon in the grid toolbar to access the Filters window.

2. From the Data tab in the Filters window, click the Change Filter icon next to the measure item.

3. Use the Measure Item Filter window to edit the filter, and click OK.

4. Change or add other filters if needed.

5. Click OK in the Filters window when you're done with all your changes.

Note: You can also click the filter icon for an item in the grid and make changes from its filter editing window that opens. The steps above are useful when editing filters on multiple items then applying all changes at once.

Relationship or Empty Filters

1. Double-click the Rows or Columns folder in view explorer. The Rows or Columns Properties window displays.

2. Adjust the Yes and No settings for the filter that you need to edit.

Note: In order for the Empty Filter property to be Yes, the Relationship Filter property must be Yes.

Total Filters

1. Click the filter icon next to the caption of the measure item in the Grand Total row or column.

2. Use the Measure Item Filter window to edit the filter.

Clear Filters

Clear Individual Filter

Click the Manage All Filters icon in the grid toolbar to access the Filters window. From the Filters window, click the Clear Filter icon ✕ next to the item names on the applicable Levels, Data, or Axis tab.

Note: Options for clearing filters also are provided in the pop-up menus for filtered items in the grid. Advanced users and administrators have that option.

Clear All Filters

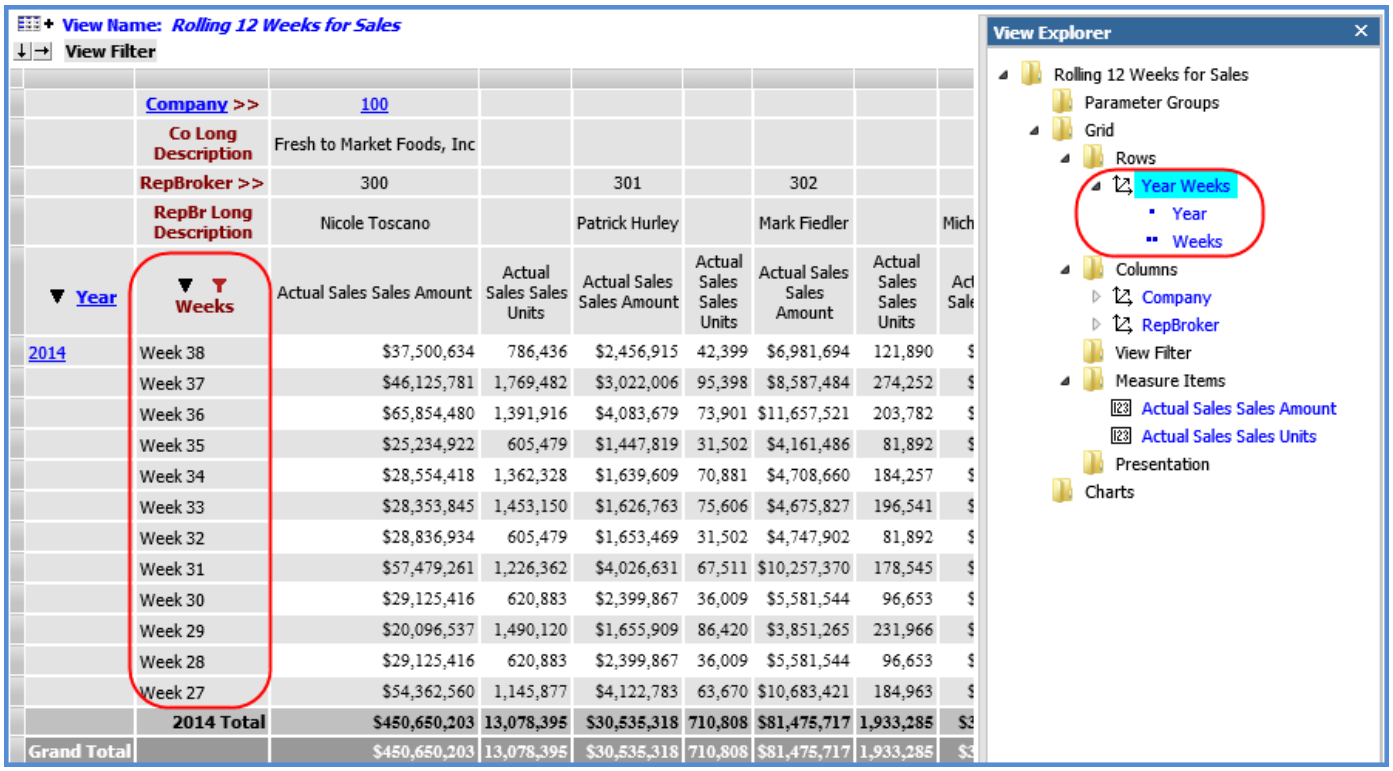
Right-click any filtered object in the grid (measure item, level, axis), and select Filter then Clear All.

Examples

Expressions for Rolling "N" Period Based Views

These examples show how to create period based views that display rolling “N” periods. This is done by creating a level filter on a time hierarchy. The time range property for the view in both examples was set to No.

The first view is a rolling 12 weeks. It has rows comprised of the two levels from the Year Weeks time hierarchy. The Weeks level has a Rolling “12” filter on it that calculates the current week and prior 11 weeks. The filter returns Week 38 back through Week 27 in this example.

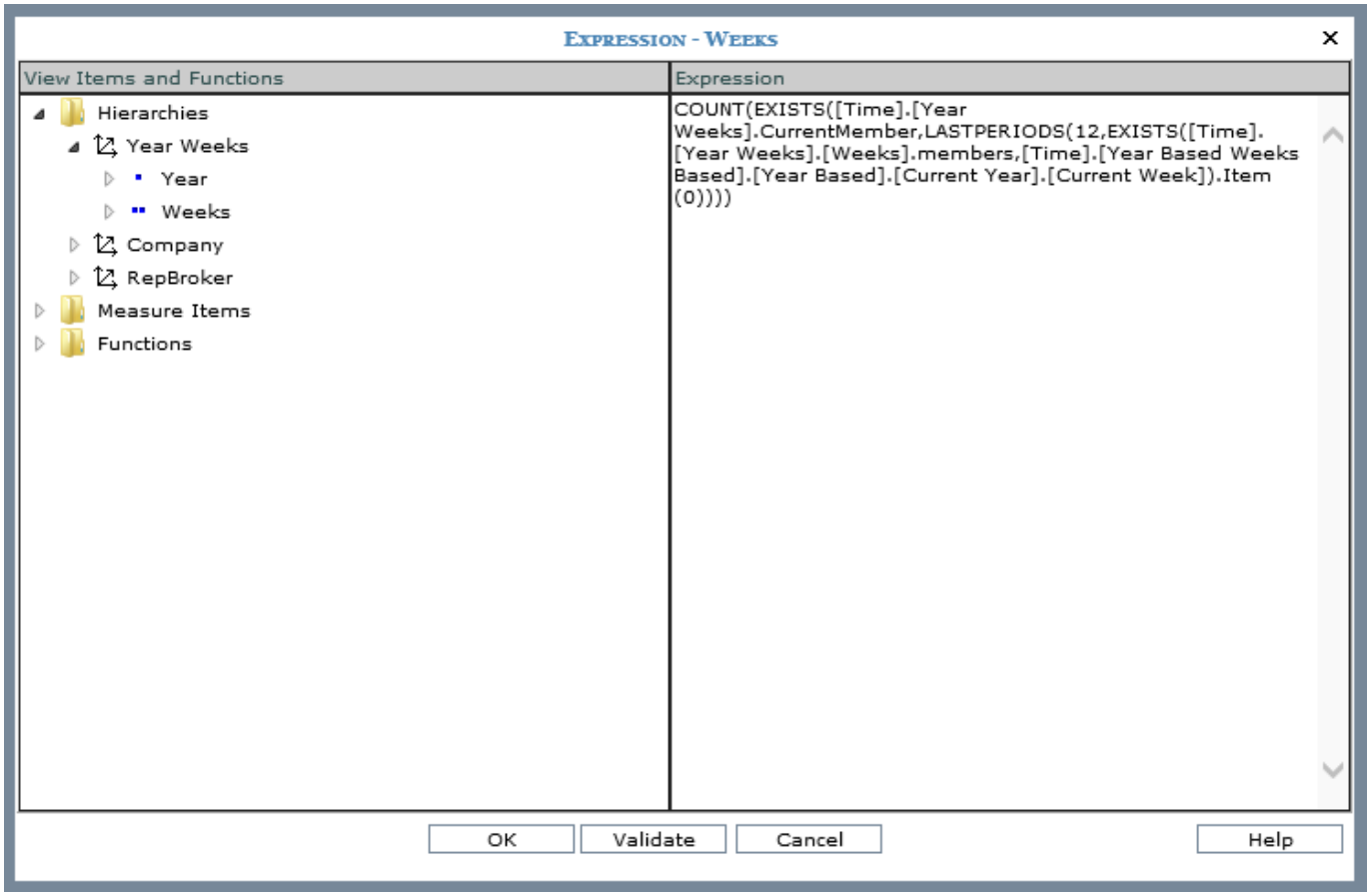


	Company >>	100						
	Co Long Description	Fresh to Market Foods, Inc						
	RepBroker >>	300		301		302		
	RepBr Long Description	Nicole Toscano		Patrick Hurley		Mark Fiedler		Mich
Year	Weeks	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units	Act Sale
2014	Week 38	$37,500,634	786,436	$2,456,915	42,399	$6,981,694	121,890	$
	Week 37	$46,125,781	1,769,482	$3,022,006	95,398	$8,587,484	274,252	$
	Week 36	$65,854,480	1,391,916	$4,083,679	73,901	$11,657,521	203,782	$
	Week 35	$25,234,922	605,479	$1,447,819	31,502	$4,161,486	81,892	$
	Week 34	$28,554,418	1,362,328	$1,639,609	70,881	$4,708,660	184,257	$
	Week 33	$28,353,845	1,453,150	$1,626,763	75,606	$4,675,827	196,541	$
	Week 32	$28,836,934	605,479	$1,653,469	31,502	$4,747,902	81,892	$
	Week 31	$57,479,261	1,226,362	$4,026,631	67,511	$10,257,370	178,545	$
	Week 30	$29,125,416	620,883	$2,399,867	36,009	$5,581,544	96,653	$
	Week 29	$20,096,537	1,490,120	$1,655,909	86,420	$3,851,265	231,966	$
	Week 28	$29,125,416	620,883	$2,399,867	36,009	$5,581,544	96,653	$
	Week 27	$54,362,560	1,145,877	$4,122,783	63,670	$10,683,421	184,963	$
	2014 Total	$450,650,203	13,078,395	$30,535,318	710,808	$81,475,717	1,933,285	$3
Grand Total		$450,650,203	13,078,395	$30,535,318	710,808	$81,475,717	1,933,285	$3

The expression for the level filter is:

COUNT(EXISTS([Time].[Year Weeks].CurrentMember,LASTPERIODS(12,EXISTS([Time].[Year Weeks].[Weeks].members,[Time].[Year Based Weeks Based].[Year Based].[Current Year].[Current Week]).Item(0))))

This expression uses the Year Based Weeks Based hierarchy to determine the Current Week, Current Year.



A simple change to the expression changes the view to a rolling 52 weeks. Change the 12 in the expression to 52. It will calculate the current week and prior 51 weeks.

COUNT(EXISTS([Time].[Year Weeks].CurrentMember,LASTPERIODS(52,EXISTS([Time].[Year Weeks].[Weeks].members,[Time].[Year Based Weeks Based].[Year Based].[Current Year].[Current Week]).Item(0))))

Here is the refreshed view after making that change. The filter returns Week 38 of 2014 through Week 39 of 2013.

	Company >>	100						
	Co Long Description	Fresh to Market Foods, Inc						
	RepBroker >>	300		301		302		303
	RepBr Long Description	Nicole Toscano		Patrick Hurley		Mark Fiedler		Michelle Kn
Year	Weeks	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sal Sales Amo
2014	Week 38	$37,500,634	786,436	$2,456,915	42,399	$6,981,694	121,890	$3,009,
	Week 37	$46,125,781	1,769,482	$3,022,006	95,398	$8,587,484	274,252	$3,701,
	Week 36	$65,854,480	1,391,916	$4,083,679	73,901	$11,657,521	203,782	$5,436,
	Week 35	$25,234,922	605,479	$1,447,819	31,502	$4,161,486	81,892	$2,159,
	Week 34	$28,554,418	1,362,328	$1,639,609	70,881	$4,708,660	184,257	$2,442,
	Week 33	$28,353,845	1,453,150	[illegible]	75,606	$4,675,827	196,541	$2,426,
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Week 6	$22,877,[illegible]	479,674	[illegible]	[illegible]	[illegible],189,877	[illegible]	$1,41[illegible]
	Week 5	$48,783,399	1,008,329	$2,751,111	50,302	$8,322,154	151,923	$3,010,
	Week 4	$25,906,067	528,655	$1,494,091	27,466	$4,132,277	75,453	$1,591,
	Week 3	$25,906,067	528,655	$1,494,091	27,466	$4,132,277	75,453	$1,591,
	Week 2	$25,906,067	528,655	$1,494,091	27,466	$4,132,277	75,453	$1,591,
	Week 1	$39,534,325	801,316	$2,394,257	41,991	$7,370,596	126,292	$2,688,
	2014 Total	**$1,174,876,032**	**30,041,048**	**$76,265,834**	**1,619,405**	**$207,724,492**	**4,500,057**	**$88,943,**
2013	Week 52	$13,628,258	272,662	$900,166	14,525	$3,238,319	50,839	$1,096,
	Week 51	$13,628,258	272,662	$900,166	14,525	$3,238,319	50,839	$1,096,
	Week 50	$13,628,258	272,662	$900,166	14,525	$3,238,319	50,839	$1,096,
	Week 49	$13,628,258	272,662	$900,166	14,525	$3,238,319	50,839	$1,096,
	Week 48	$23,706,682	471,237	$1,916,347	33,655	$4,924,612	79,136	$1,773,
	Week 47	$23,706,682	471,237	$1,916,347	33,655	$4,924,612	79,136	$1,773,
	Week 46	$23,706,682	471,237	$1,916,347	33,655	$4,924,612	79,136	$1,773,
	Week 45	$23,706,682	471,237	$1,916,347	33,655	$4,924,612	79,136	$1,773,
	Week 44	$48,523,380	961,223	$4,342,602	68,863	$10,599,859	170,432	$4,258,
	Week 43	$24,816,698	489,986	$2,426,255	35,209	$5,675,247	91,297	$2,485,
	Week 42	$24,816,698	489,986	$2,426,255	35,209	$5,675,247	91,297	$2,485,
	Week 41	$24,816,698	489,986	$2,426,255	35,209	$5,675,247	91,297	$2,485,
	Week 40	$68,146,075	1,395,716	$6,152,394	96,903	$13,375,194	231,045	$5,918,
	Week 39	$43,329,377	905,730	$3,726,139	61,695	$7,699,948	139,748	$3,433,
	2013 Total	**$383,788,684**	**7,708,222**	**$32,765,950**	**525,807**	**$81,352,467**	**1,335,014**	**$32,548,**
Grand Total		**$1,558,664,716**	**37,749,270**	**$109,031,784**	**2,145,212**	**$289,076,959**	**5,835,071**	**$121,491,**

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If you want to see rolling periods in the future, use a negative number for the LASTPERIODS part of the expression. Here is the expression when the 52 is changed to -52. It will calculate the current week and next 51 weeks.

COUNT(EXISTS([Time].[Year Weeks].CurrentMember,LASTPERIODS(-52,EXISTS([Time].[Year Weeks].[Weeks].members,[Time].[Year Based Weeks Based].[Year Based].[Current Year].[Current Week]).Item(0))))

Here is the refreshed view after making that change. The filter returns Week 37 of 2015 through Week 38 of 2014. The future weeks for actual sales do not have data yet, so those cells are empty in the view. This type of filter would be useful in views that contain measures that have anticipated future data, such as budget or forecast measures.

	Company >>	100							
	Co Long Description	Fresh to Market Foods, Inc							
	RepBroker >>	300		301		302		303	
	RepBr Long Description	Nicole Toscano		Patrick Hurley		Mark Fiedler		Michelle Knapp	
Year	Weeks	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	A
2015	Week 37								
	Week 36								
	Week 35								
	Week 34								
	Week 33								
	Week 32								
	Week 5								
	Week 4								
	Week 3								
	Week 2								
	Week 1								
	2015 Total								
2014	Week 52								
	Week 51								
	Week 50								
	Week 49								
	Week 48								
	Week 47								
	Week 46								
	Week 45								
	Week 44								
	Week 43								
	Week 42								
	Week 41								
	Week 40	$37,500,634	786,436	$2,456,915	42,399	$6,981,694	121,890	$3,009,195	4
	Week 39	$37,500,634	786,436	$2,456,915	42,399	$6,981,694	121,890	$3,009,195	4
	Week 38	$37,500,634	786,436	$2,456,915	42,399	$6,981,694	121,890	$3,009,195	4
	2014 Total	$112,501,903	2,359,309	$7,370,746	127,197	$20,945,082	365,669	$9,027,586	13
Grand Total		$112,501,903	2,359,309	$7,370,746	127,197	$20,945,082	365,669	$9,027,586	13

Expressions for Filtering Levels

Expression filters that reference member values and attribute relationships were used to filter levels in the following examples. The levels referenced in the filters need to be visible in the view in order for the filters to impact the view.

- Single Member in Expression
- Multiple Members in Expression
- Attribute Relationships in Expression

Note: These same types of expressions can be used when creating dynamic user lists.

Single Member in Expression

This expression returns Customer Sold-To members with values greater than 150280. You can adjust the filter quickly to return different results by changing out the > symbol in the expression for other symbols (such as <) or by changing the "150280" in the expression to a different value.

[Customer Sold-To].[Customer Sold-To].CurrentMember.Name > "150280"

View Name: *Expression Filter with Member*

View Filter

	Product Brand >>	001					002
	PBrnd Long Description	Tip Top					Dew Dr
Customer Sold-To	SldTo Long Description	Actual Sales Sales Units Jan 2014 to Sep 2014	Actual Sales Sales Amount Jan 2014 to Sep 2014	YTD % of Total	Actual Sales Sales Units Sep 2014 to Sep 2014	Actual Sales Sales Amount Sep 2014 to Sep 2014	Actual S Sales U Jan 201 Sep 20
150290	Montelissi Distribution	43,082	$2,462,797	10%	5,130	$319,989	4
150300	Auburn Providers	43,387	$2,658,087	10%			6
150310	Maple Tree Foods	36,752	$2,266,995	9%	12,409	$797,832	6
150320	Quebec Foods	30,795	$1,653,760	6%	5,846	$383,155	4
150330	Canadian Imports	37,630	$2,453,227	9%	5,697	$382,779	8
150340	Alberta Foods	41,301	$2,415,657	9%			6
150350	Chicago's Finest	54,234	$3,468,513	13%	11,812	$782,800	3
150360	St. Louis Distributors	41,581	$2,296,830	9%	6,085	$374,624	4
150370	Southwest Foods	34,992	$2,080,132	8%	17,718	$1,141,874	4
150380	Packingham Foods	50,805	$2,910,259	11%	5,816	$384,567	7
150390	Pacific Providers	23,249	$1,205,925	5%			1
Grand Total		437,809	$25,872,183	100%	70,514	$4,567,621	59

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Multiple Members in Expression

This expression filter returns Customer Sold-To members in a range that is greater than or equal to 150280 and less than or equal to 150350.

[Customer Sold-To].[Customer Sold-To].CurrentMember.Name >= "150280" AND [Customer Sold-To].[Customer Sold-To].CurrentMember.Name <= "150350"

View Name: *Expression Filter with Member*

View Filter

	Product Brand >>	001					002
	PBrnd Long Description	Tip Top					Dew Dro
Customer Sold-To	SldTo Long Description	Actual Sales Sales Units Jan 2014 to Sep 2014	Actual Sales Sales Amount Jan 2014 to Sep 2014	YTD % of Total	Actual Sales Sales Units Sep 2014 to Sep 2014	Actual Sales Sales Amount Sep 2014 to Sep 2014	Actual Sa Sales Un Jan 2014 Sep 201
150280	New York Foods	32,484	$2,075,524	11%	6,085	$358,317	48
150290	Montelissi Distribution	43,082	$2,462,797	13%	5,130	$319,989	45
150300	Auburn Providers	43,387	$2,658,087	14%			69
150310	Maple Tree Foods	36,752	$2,266,995	12%	12,409	$797,832	65
150320	Quebec Foods	30,795	$1,653,760	9%	5,846	$383,155	46
150330	Canadian Imports	37,630	$2,453,227	13%	5,697	$382,779	81
150340	Alberta Foods	41,301	$2,415,657	12%			64
150350	Chicago's Finest	54,234	$3,468,513	18%	11,812	$782,800	34
Grand Total		319,666	$19,454,561	100%	46,979	$3,024,872	456

Attribute Relationships in Expression

This filter returns Product Category members that have the text 'fruit' in their PCat Long Description attribute relationship.

(INSTR(1, [Product Category].[Product Category].CurrentMember.Properties("PCat Long Description"), "Fruit") <> 0)

View Name: *Expression Filter with AR*

View Filter

Product Category	PCat Long Description	Actual Sales Sales Amount Wk 1 2014 to Wk 38 2014	% of Total	Actual Sales Sales Units Wk 1 2014 to Wk 38 2014	% of Total	Actual Sales Sales Amount Wk 38 2014 to Wk 38 2014	Actual Sales Sales Units Wk 38 2014 to Wk 38 2014
201	Canned Fruit	$1,979,809,747	83.39%	45,351,254	83.38%	$58,950,296	1,123,590
204	Fresh Fruit	$294,627,014	12.41%	7,243,387	13.32%	$11,084,764	223,802
207	Frozen Fruit Products	$99,856,357	4.21%	1,794,107	3.30%	$3,193,268	45,582
Grand Total		$2,374,293,118	100.00%	54,388,749	100.00%	$73,228,327	1,392,973

Expressions for Filtering an Axis

The following example shows an axis filter that uses just measure items. The table after the example provides a few other examples including ones that use both a measure item and an attribute relationship.

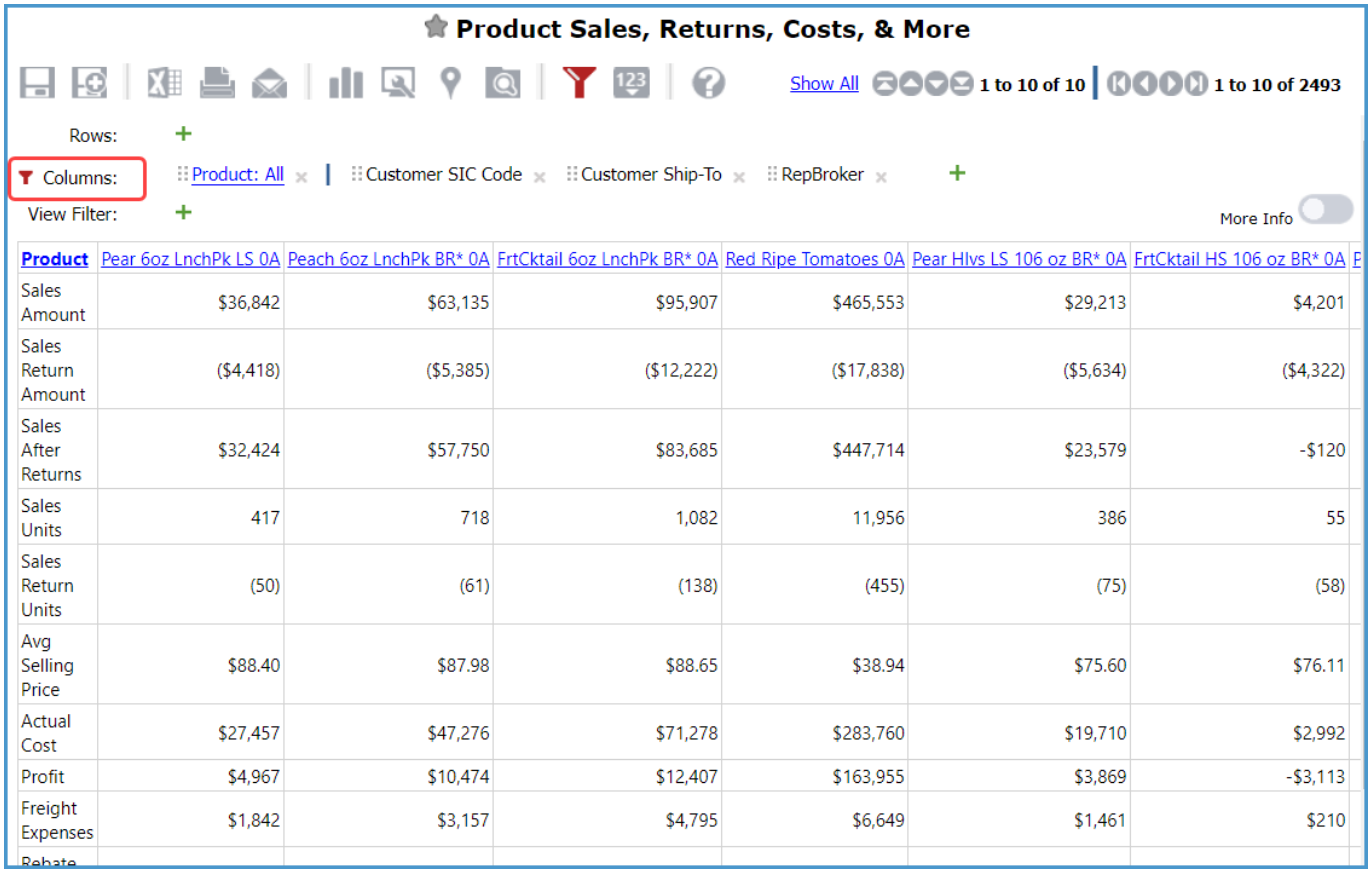
Note that expressions that reference attribute relationships should use an IIF statement to check whether or not the level for the attribute relationship is visible in the view.

- Example 1 - Two Measure Items in Axis Filter
- More Example Expressions

Example 1 - Two Measure Items in Axis Filter

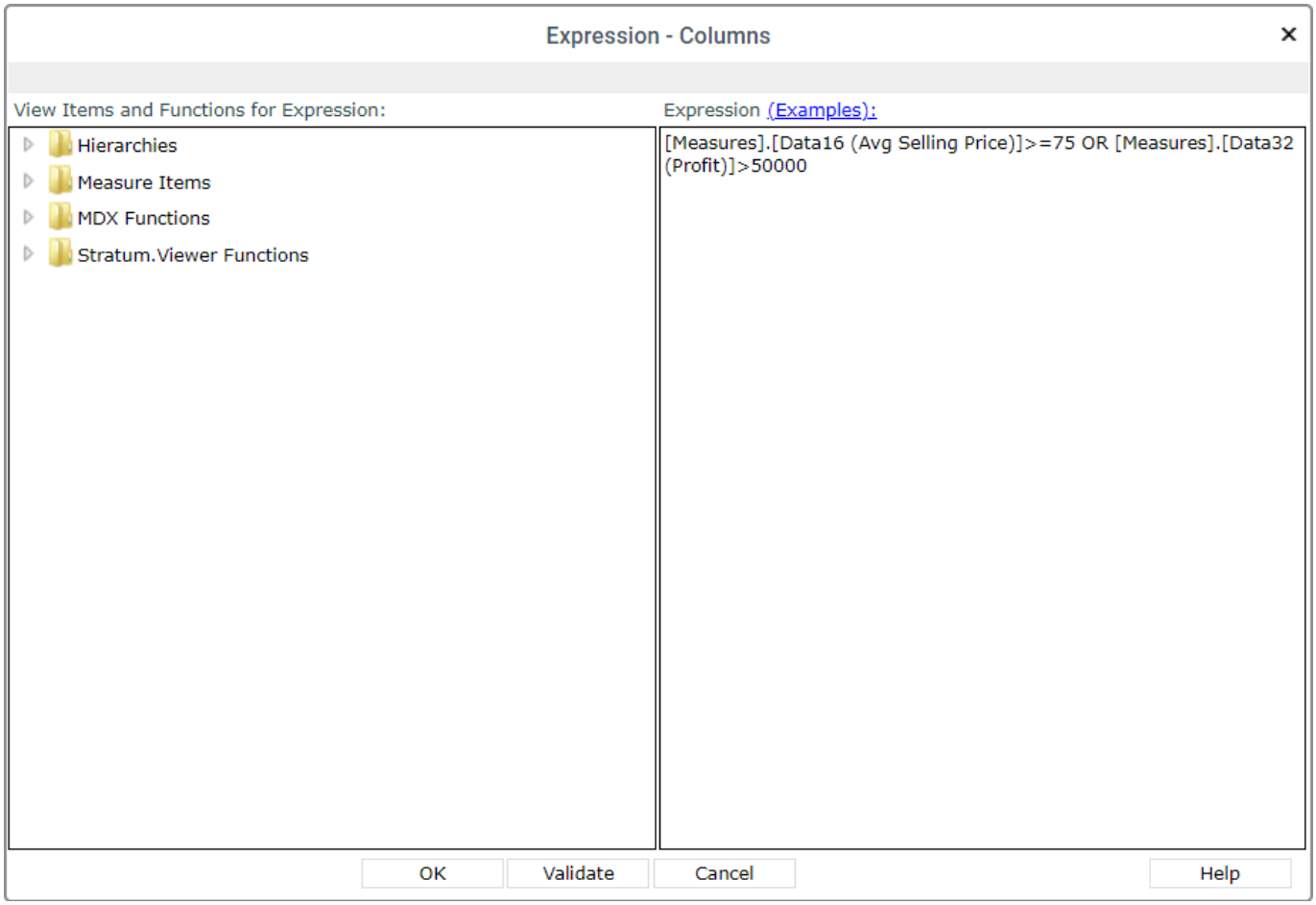
This axis filter on columns returns columns where the Avg Selling Price is greater than or equal to $75.00 OR the Profit is greater than $50,000.

[Measures].[Data16 (Avg Selling Price)]>=75 OR [Measures].[Data32 (Profit)]>50000



Product	Pear 6oz LnchPk LS 0A	Peach 6oz LnchPk BR* 0A	FrtCktail 6oz LnchPk BR* 0A	Red Ripe Tomatoes 0A	Pear Hlvs LS 106 oz BR* 0A	FrtCktail HS 106 oz BR* 0A
Sales Amount	$36,842	$63,135	$95,907	$465,553	$29,213	$4,201
Sales Return Amount	($4,418)	($5,385)	($12,222)	($17,838)	($5,634)	($4,322)
Sales After Returns	$32,424	$57,750	$83,685	$447,714	$23,579	-$120
Sales Units	417	718	1,082	11,956	386	55
Sales Return Units	(50)	(61)	(138)	(455)	(75)	(58)
Avg Selling Price	$88.40	$87.98	$88.65	$38.94	$75.60	$76.11
Actual Cost	$27,457	$47,276	$71,278	$283,760	$19,710	$2,992
Profit	$4,967	$10,474	$12,407	$163,955	$3,869	-$3,113
Freight Expenses	$1,842	$3,157	$4,795	$6,649	$1,461	$210
Rebate						

The next image shows the Expression window for the filter.



More Example Axis Filter Expressions

Desired Results...	Example Axis Filter
Only for the Product level, return rows where Prod ABC Classification = “A” AND Actual Sales Sales Units Jan 2022 to Sep 2022 is > 150,000. When at any other level – No filter applied.	IIF([Product].[Product].CurrentMember.Level.Name="Product" , IIF ([Product].[Product].Properties("Prod ABC Classification")="A" AND [Measures].[Data1 (Actual Sales Sales Units Jan 2022 to Sep 2022)]>150000, 1,0) , 1)
When at Product level, will return rows where Actual Sales Sales Units Jan 2022 to Sep 2022 is > 150,000. When at any other level - Actual Sales Sales Units Jan 2022 to Sep 2022 is > 10,000,000.	IIF([Product].[Product].CurrentMember.Level.Name="Product" , IIF ([Measures].[Data1 (Actual Sales Sales Units Jan 2022 to Sep 2022)]>150000, 1,0) , [Measures].[Data1 (Actual Sales Sales Units Jan 2022 to Sep 2022)] > 10000000)
When at Product level, will return rows where Prod ABC Classification = “A” AND Actual Sales Sales Units Jan 2022 to Sep 2022 is > 150,000. When at any other level - Actual Sales Sales Units Jan 2022 to Sep 2022 is > 10,000,000.	IIF([Product].[Product].CurrentMember.Level.Name="Product" , IIF ([Product].[Product].Properties("Prod ABC Classification")="A" AND [Measures].[Data1 (Actual Sales Sales Units Jan 2022 to Sep 2022)]>150000, 1,0) , [Measures].[Data1 (Actual Sales Sales Units Jan 2022 to Sep 2022)] > 10000000)

Examples of Sorts and Filters on Totals

This view displays year to date (YTD) sales data by Sales Director and UPC Global Number. A filter has been applied to the total column for the current year YTD sales. The result is a view where the only detail sales data on display for each Sales Director is that of Products that make up the top 20 percent of total YTD sales.

1 to 7 of 7 | 1 to 6 of 6

View Name: *Top Performing UPC for YTD by Director*

View Filter

Top Percent 20

	Sales Dir >>	Helen Briggs		Steve Mentas		Total	
UPC Global Number	UPC Long Description	Actual Sales YTD 2014	Actual Sales YTD 2013	Actual Sales YTD 2014	Actual Sales YTD 2013	Actual Sales YTD 2014	Actual Sales YTD 2013
0 - 13800 - 30321 - 9	Frozen Lasagna Dinner	$67,474,884	$114,640,211	$52,791,395	$99,799,773	$120,266,278	$205,439,985
0 - 13800 - 78934 - 9	Meatloaf, Frozen	$62,969,705	$109,019,253	$53,046,268	$88,655,860	$116,015,974	$197,675,113
0 - 24000 - 12431 - 4	Applesauce 106oz PL*	$61,198,544	$102,926,472	$39,810,495	$66,757,441	$101,009,039	$169,683,913
0 - 02749 - 25408 - 6	Asparagus	$54,327,537	$90,241,412	$36,101,356	$61,306,990	$90,428,893	$151,548,403
0 - 06403 - 92736 - 2	Orange Juice Conc.	$50,270,451	$84,207,881	$33,523,552	$56,420,498	$83,794,003	$140,628,378
0 - 02749 - 99267 - 6	Cherries, Bing	$42,383,321	$73,262,012	$31,376,355	$52,936,770	$73,759,676	$126,198,782
Grand Total		$338,624,442	$574,297,241	$246,649,422	$416,877,332	$585,273,863	$991,174,573

In this example, quarterly sales data is displayed by Distribution Center Warehouse and Customer Ship-To. A filter has been applied to the total column for the current year, current quarter sales. The result is a view where the detail data on display is Customer Ship-To's with total sales greater than $2,000,000. Also, a sort was applied to the same total column to organize the Customer Ship-To's in descending order.

1 to 50 of 79 | 1 to 6 of 6 Viewer

View Name: *Ship-To Analysis by Warehouse*

View Filter

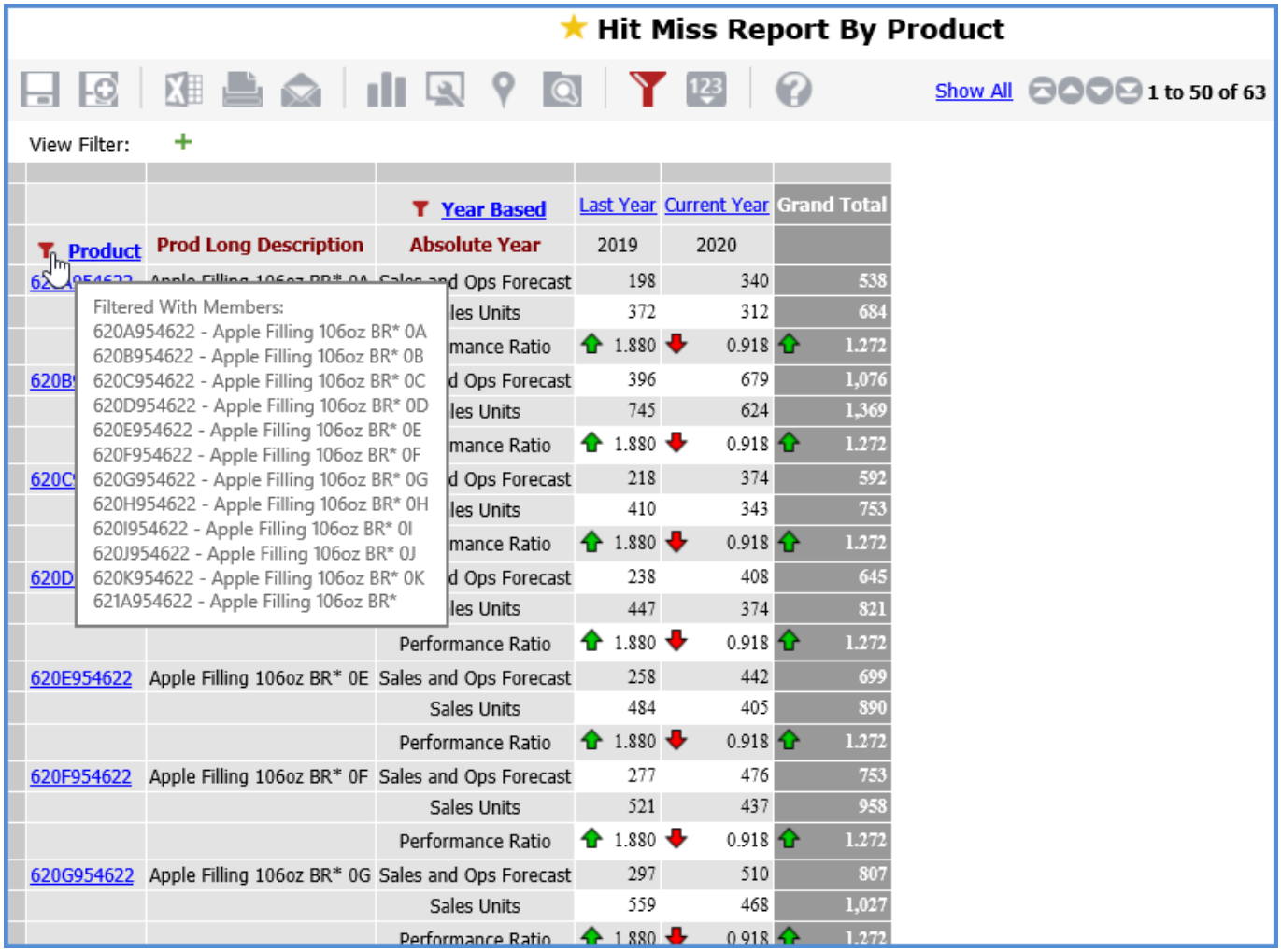
>= 2000000

Distribution Center Warehouse >>	19		21		Total	
Customer Ship-To	Actual Sales Amount Q3 2014	Actual Sales Amount Q3 2013	Actual Sales Amount Q3 2014	Actual Sales Amount Q3 2013	Actual Sales Amount Q3 2014	Actual Sales Amount Q3 2013
Wilder Foods -- St Louis MO WOB	$3,784,881	$3,784,881	$4,611,329	$4,611,329	$8,396,209	$8,396,209
Wilder Foods -- St Louis MO WOJ	$3,406,393	$3,406,393	$4,150,196	$4,150,196	$7,556,588	$7,556,588
Wilder Foods -- St Louis MO WOI	$3,217,149	$3,217,149	$3,919,629	$3,919,629	$7,136,778	$7,136,778
Wilder Foods -- St Louis MO	$3,045,002	$3,045,002	$3,701,887	$3,701,887	$6,746,889	$6,746,889
Wilder Foods -- St Louis MO WOH	$3,027,905	$3,027,905	$3,689,063	$3,689,063	$6,716,967	$6,716,967
Wilder Foods -- St Louis MO WOG	$2,838,660	$2,838,660	$3,458,496	$3,458,496	$6,297,157	$6,297,157
Wilder Foods -- St Louis MO WOF	$2,649,416	$2,649,416	$3,227,930	$3,227,930	$5,877,347	$5,877,347
Wilder Foods -- St Louis MO WOE	$2,460,172	$2,460,172	$2,997,364	$2,997,364	$5,457,536	$5,457,536
Wilder Foods -- Buffalo NY WOB	$2,537,763	$2,537,763	$2,548,447	$2,548,447	$5,086,210	$5,086,210
Wilder Foods -- St Louis MO WOD	$2,270,928	$2,270,928	$2,766,797	$2,766,797	$5,037,726	$5,037,726
Wilder Foods -- St Louis MO WOC	$2,081,684	$2,081,684	$2,536,231	$2,536,231	$4,617,915	$4,617,915
Wilder Foods -- Buffalo NY WOJ	$2,283,987	$2,283,987	$2,293,602	$2,293,602	$4,577,589	$4,577,589
Wilder Foods -- Buffalo NY WOI	$2,157,098	$2,157,098	$2,166,180	$2,166,180	$4,323,278	$4,323,278

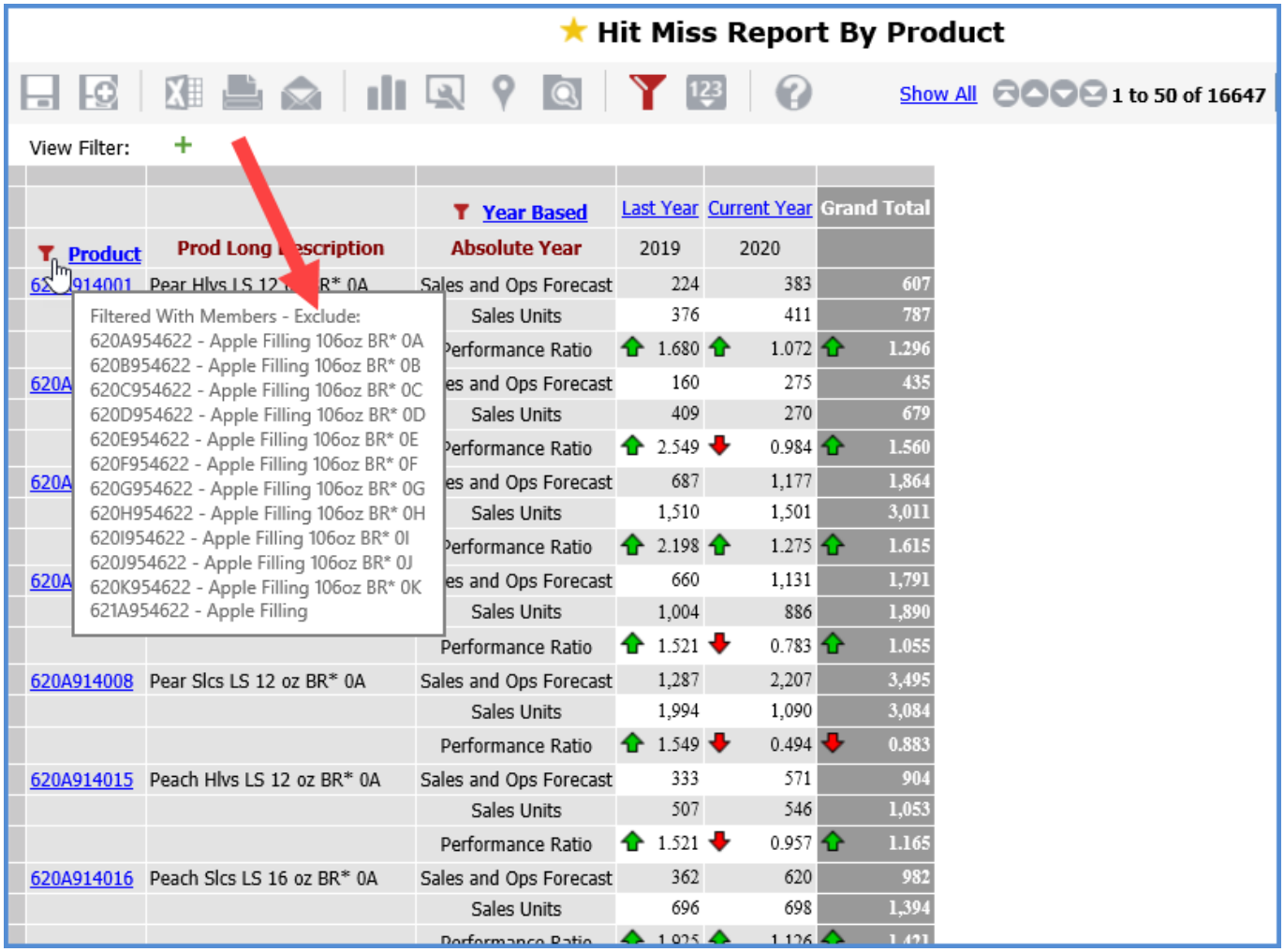
Include Vs Exclude Filter Examples

The following examples show how view results change when you switch a filter's mode between Include and Exclude. The Include mode means the applied filter will return only the members specified by your filter selections/criteria. The Exclude mode means the applied filter will return all members ***except*** the ones specified by your filter selections/criteria.

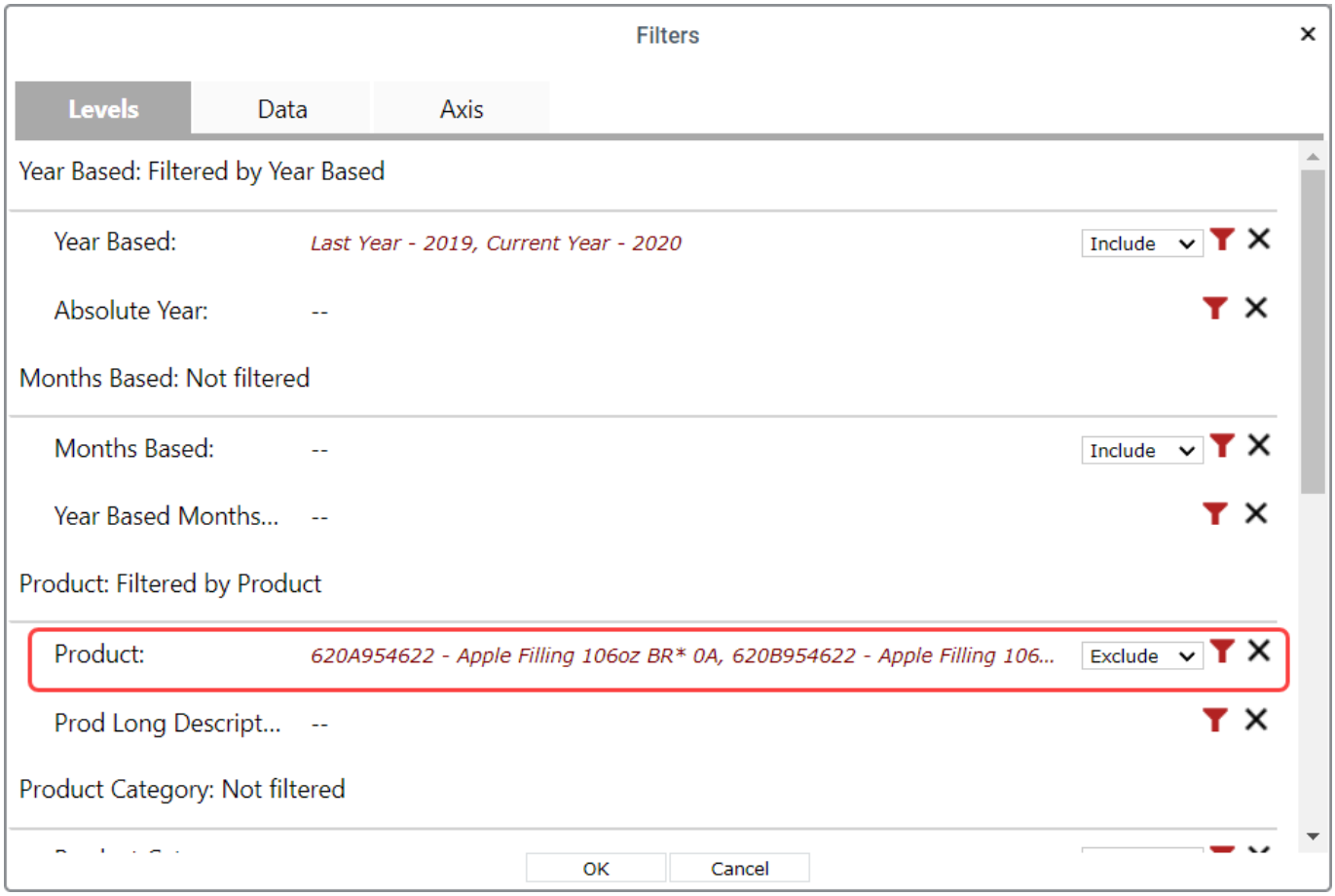
This view has a member list filter on the Product level. The mode is Include, and 20 "Apple Filling" members from Product were selected for the filter. The 20 members get applied to filter that level. Results are for those 20 members. The second image shows how results change when the filter mode is changed to Exclude.



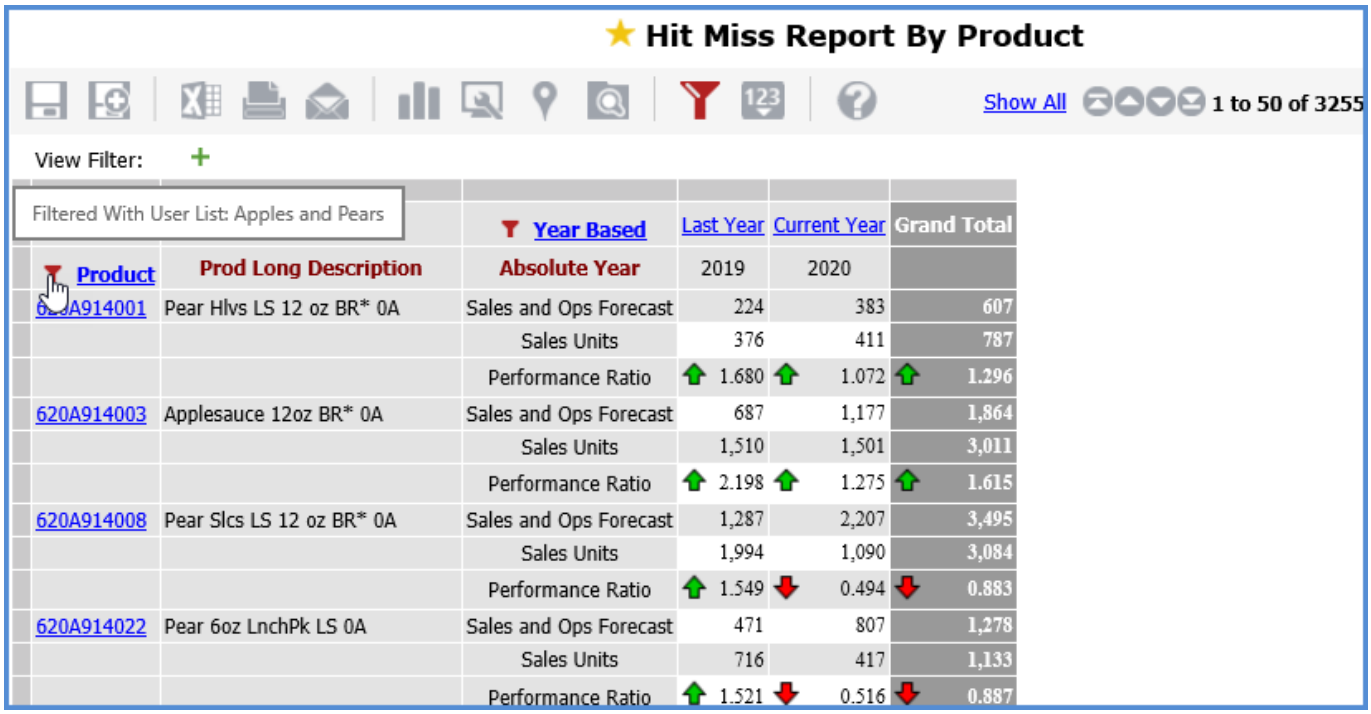
Here is the view after the filter mode for Product was switched to Exclude. All members for the level except the 20 selected for the filter get applied to filter the Product level. Results reflect data for all Products except the 20 “Apple Filling” Products. The label that shows when you hover over the filter icon displays the text “Exclude” to indicate the filter is in that mode



Filter mode was changed easily from the Filters window accessed from the grid toolbar.

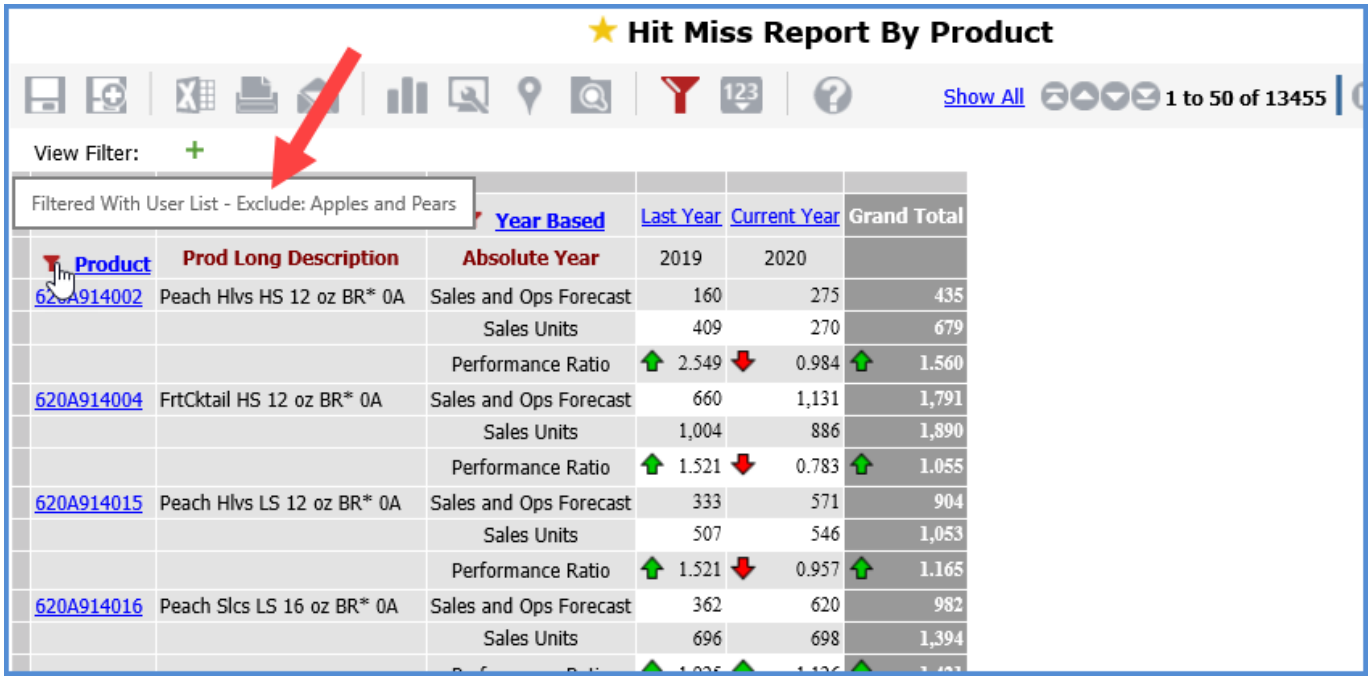


Here is the view, adjusted to filter the Product level with a user list. Its mode is Include. The set of members returned by the user list criteria get applied to filter the level. Results are for those members only. The last two images show how results change when the filter mode for Product is changed to Exclude.

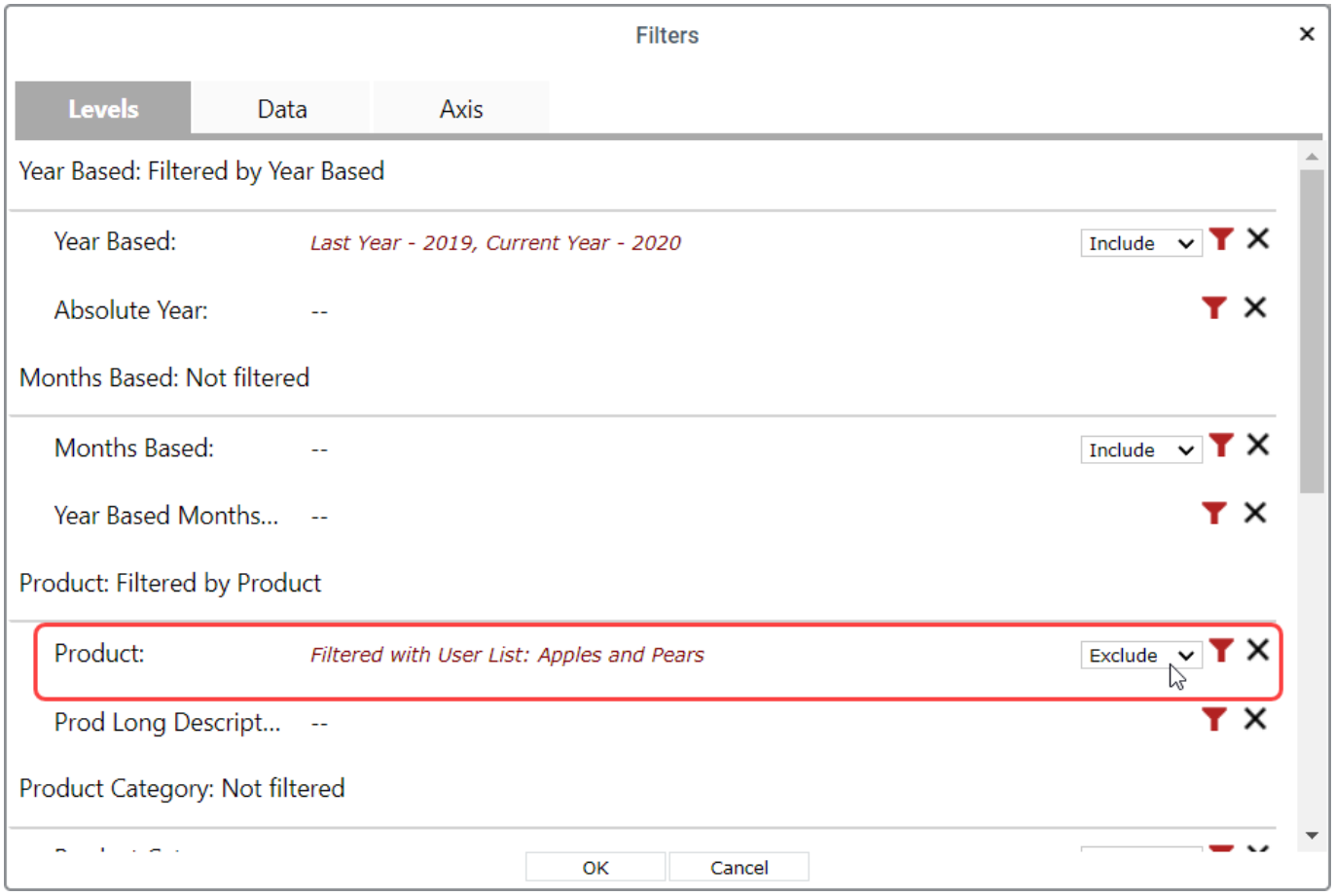


Product	Prod Long Description	Year Based / Absolute Year	Last Year 2019	Current Year 2020	Grand Total
620A914001	Pear Hlvs LS 12 oz BR* 0A	Sales and Ops Forecast	224	383	607
		Sales Units	376	411	787
		Performance Ratio	1.680	1.072	1.296
620A914003	Applesauce 12oz BR* 0A	Sales and Ops Forecast	687	1,177	1,864
		Sales Units	1,510	1,501	3,011
		Performance Ratio	2.198	1.275	1.615
620A914008	Pear Slcs LS 12 oz BR* 0A	Sales and Ops Forecast	1,287	2,207	3,495
		Sales Units	1,994	1,090	3,084
		Performance Ratio	1.549	0.494	0.883
620A914022	Pear 6oz LnchPk LS 0A	Sales and Ops Forecast	471	807	1,278
		Sales Units	716	417	1,133
		Performance Ratio	1.521	0.516	0.887

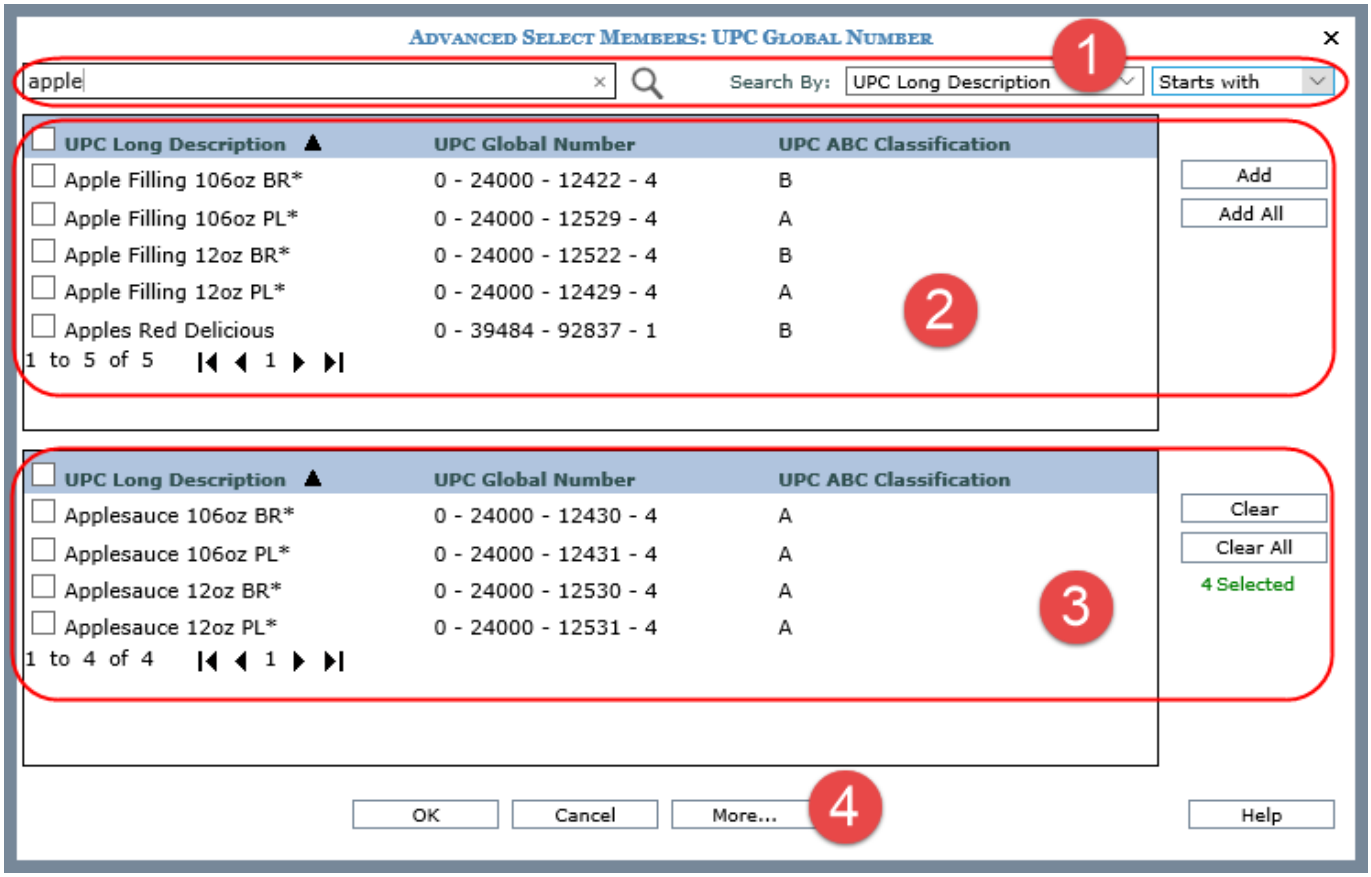
Here is the view after the filter mode for Product was switched to Exclude. All members for the level except the set that meet the user list criteria are applied to filter the level. The label that shows when you hover over the filter icon displays the text “Exclude” to indicate the filter is in that mode.



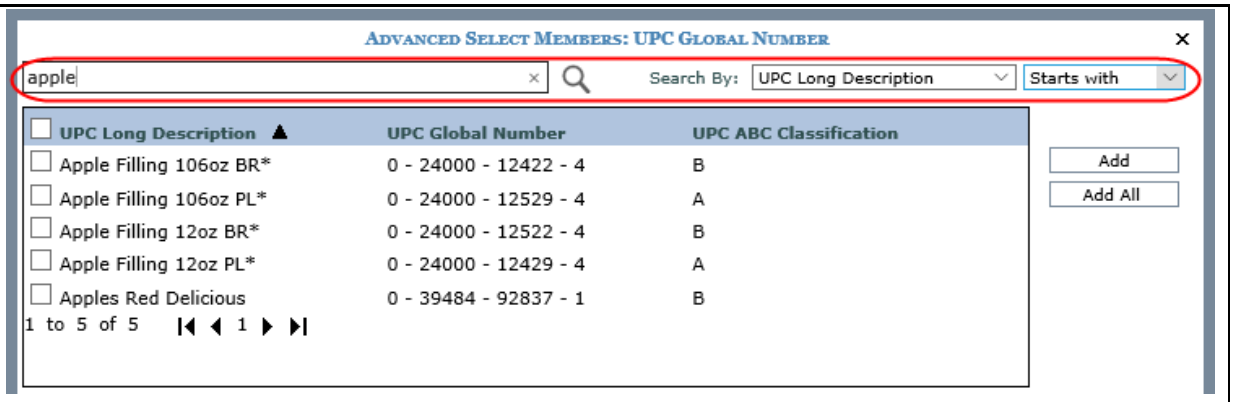
This filter mode change was made from the Filters window accessed from the grid toolbar.



Advanced Select Members Window



1	Use the search properties to specify the criteria and the parameters by which to search for members to be used in the member list. That list can be used as a level filter, to create a user list, or to help build an expression. **Note:** The window also is used when administrators set up roles. Click the search icon after you specify your search properties: • Enter a value in the search field. Multiple values can be entered by separating them with a semicolon. If the field is left blank, the available list displays all members for the active level. • Optionally use the Search By drop-down lists. The first list is to select the attribute relationship to perform the search on. The other list lets you choose whether you want your search to contain, not contain, start with, be equal to, not equal to, greater than, or less than the value(s) specified in the search. In the following example, we searched for UPC long descriptions starting with “apple” and 5 items were retrieved.



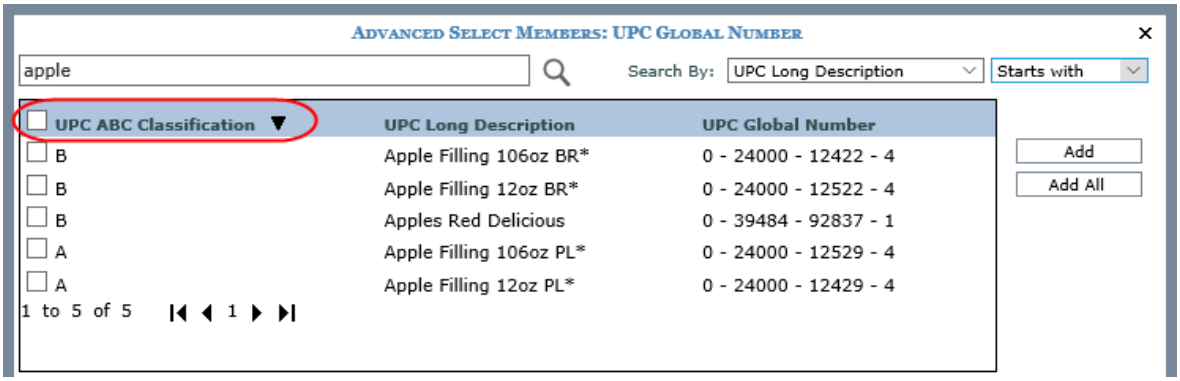
2

Available Selection list – The list area displays members returned by your search. Click checkboxes next to members then click Add to move the selected members to the bottom portion of the window. Click OK when you are done making various member selections.

Other options and tips:

- Selecting members in the top portion of the window then clicking OK will add the selected members to a filter and close the window.
- Click the checkbox in the heading area to select or deselect all members on all pages in the list at once.
- Use Shift+Click as a shortcut to selecting a range of consecutive members (click the first item, then press Shift key while clicking the last item).
- Click Add All to add all of the available members, from all pages, to the selected list in the bottom portion of the window.

Columns in this area are sort and drag/drop enabled. In the following example, we clicked the UPC ABC Classification column and dragged it to the first position. We also clicked the Sort icon and changed the sort from ascending to descending.



Use the paging arrows and links at the bottom of the list to move between pages of members. Selections made on various pages are retained as you move between pages in the list.

Note: For all windows that display lists (views, user lists, etc.), there is a single administrative setting on the Application window that controls the page size.

3

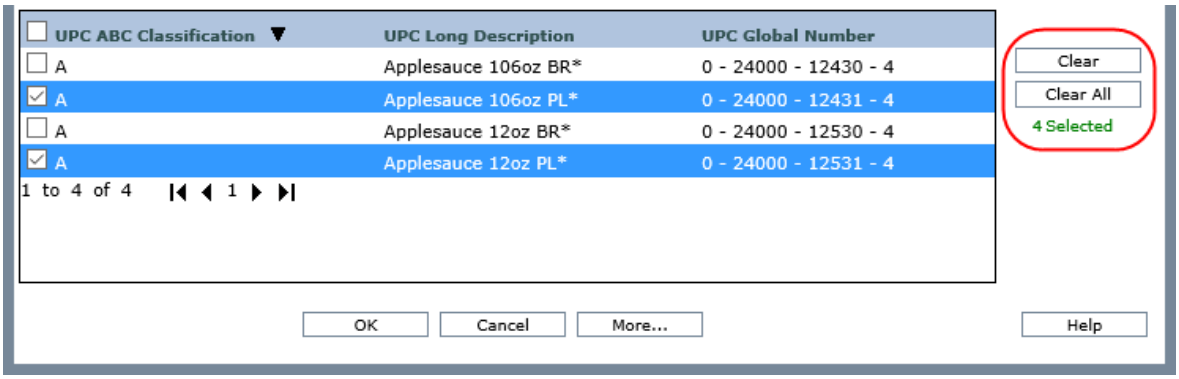
Selected list - displays the members selected for the member list. A count under the Clear All button indicates how many members are included in the member list filter.

To clear members, click checkboxes next to members you want to remove from the filter and then click Clear when you are done making selections.

Other options and tips:

- Use the checkbox in the heading area to select or deselect all members on all pages in the list at once.
- Use Shift+Click as a shortcut to selecting a range of consecutive members (click the first item, then press Shift key while clicking the last item).
- Click Clear All to clear all of the members, from all pages of the selected list.

In the following example, there are four items in the filter and two have been selected with the intention of clearing them. After the Clear button is clicked, the filter will contain only two items.



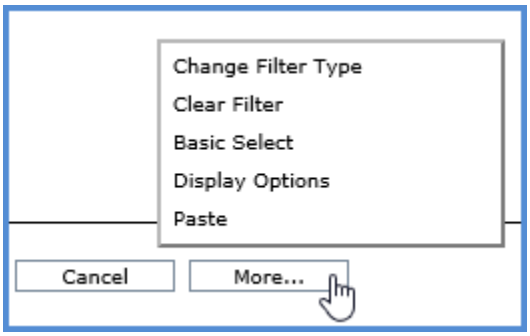
Use the paging arrows and links at the bottom of the list to move between pages of members. Selections made on various pages are retained as you move between pages in the list.

Note: For all windows that display lists (views, user lists, etc.), there is a single administrative setting on the Application window that controls the page size.

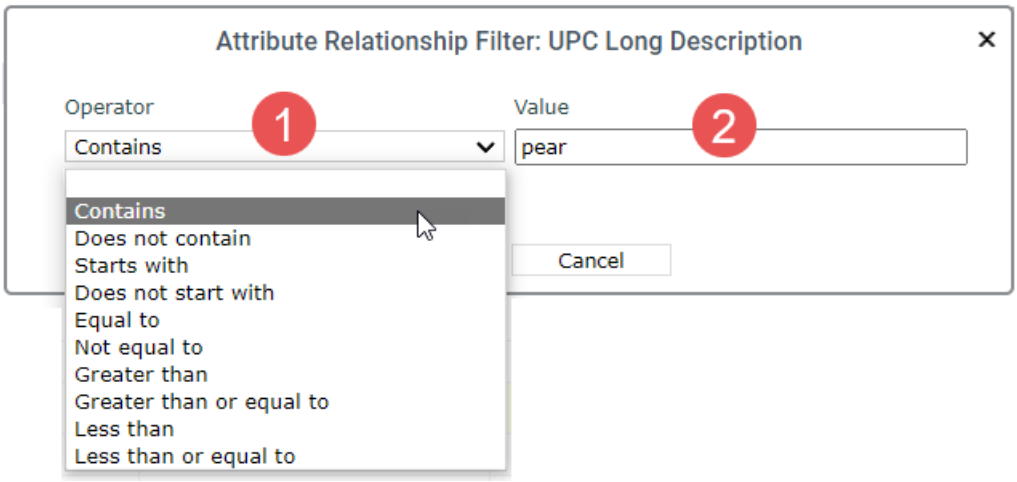
4

More… -- Click the More button for additional features:

- **Change Filter Type** –Click to access the Select Filter Method window if you need to apply a different type of filter to the level (User List, Named Set, or Expression).
- **Clear Filter** – Click as a shortcut to clearing the filter from the level.
- **Basic Select** – Click to access the Select Members window. This option may not display depending on administrative settings for the level. Administrators determine which version(s) of the window are available by dimension.
- **Display Options** – Use to change the display columns in this window. You can display up to 10 display columns for a level in the Advanced Select Members window.
- **Paste** – Click to access the Paste Members window, which lets you copy a list of members into the member list that you are building. Valid values identified in the Paste Members window will display in the bottom half of the Advanced Select Members window when you are done identifying members for your filter via the Paste Members window.

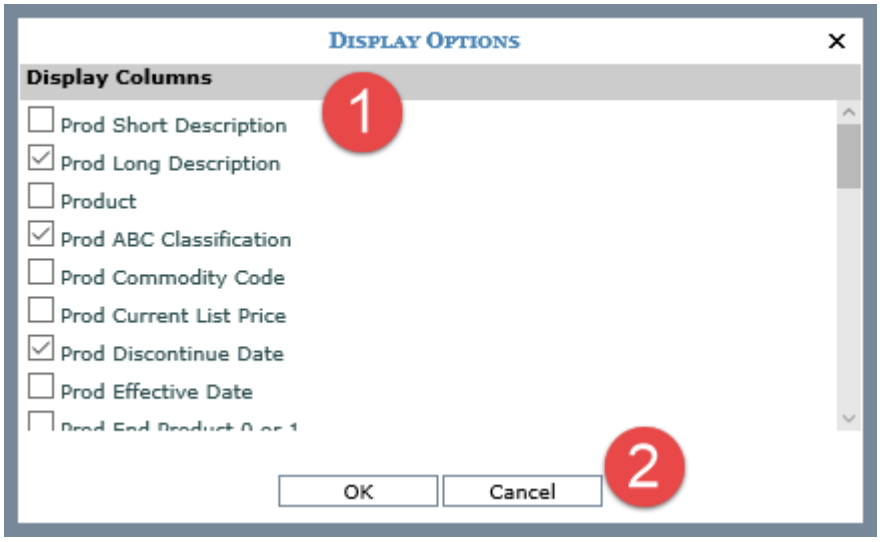


Attribute Relationship Filter Window



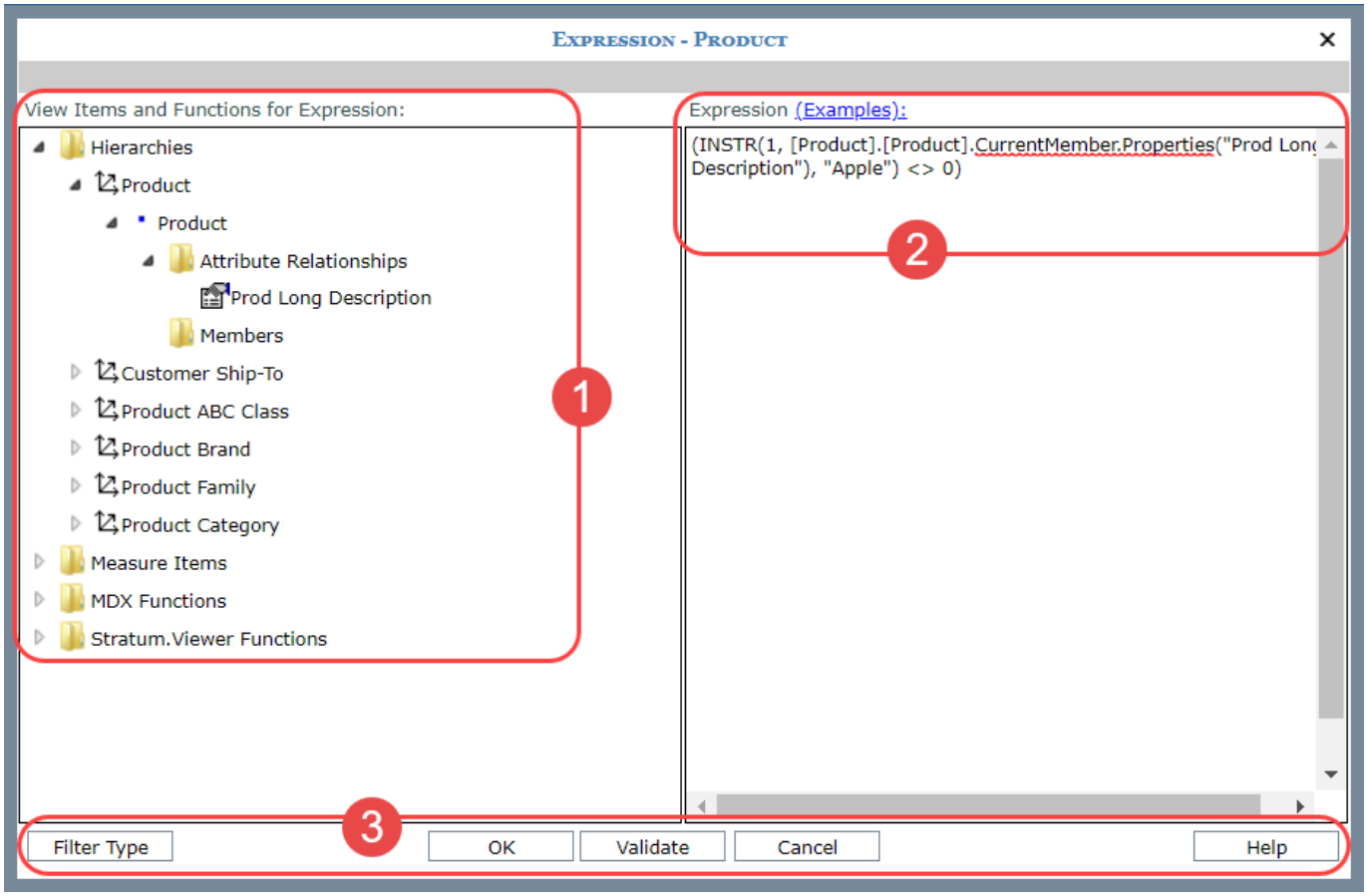
1	**Operator list** - Choose what type of filter to apply, such as contains, equal to, greater than, or less than.
2	**Value list** - Type in the value by which to filter the attribute relationship data.

Display Options Window for Select and Advanced Select Members Windows



1	**Display Columns** - Select or deselect columns to control the information that displays on the Select Members and Advanced Select Members windows. Up to 10 columns of information can be displayed. The columns that display by default depend on where you accessed the window from within Stratum.Viewer. If accessed from views, the default columns are what's displayed in the grid. Up to the first 10 attribute relationships used in the view will be used as display columns. If accessed from windows such as User List Maintenance, the default columns are determined by administrator settings in the Dimension window. Up to the first 10 attribute relationships selected in administrator settings will be used as display columns.
2	**OK** - Clicking OK applies the changes for the current session only in the Select and Advanced Select Members windows. When you toggle back and forth between the two windows, the changes will be reflected in both windows. Once you exit the windows, display options return to their defaults.

Expression Window for Filters



1	**View Items and Functions for Expression** – Use this part of the window to select items or functions to use in building an expression for a filter on a level or an axis filter in the view. Click items or drag and drop them to use them in the Expression section. Objects available to work with as you build your filter expression are described below. **Hierarchies Folder** – Hierarchies, levels, and attribute relationships that are part of the view definition are in list in the Hierarchies folder. They appear in the same order as in the view explorer and regardless of whether or not they are visible or actively showing in the grid. The Levels folder can be expanded to see the Attribute Relationships and Members folders. If attribute relationships were selected for the level, they will display when the Attribute Relationships folder is expanded. • **Levels and Attribute Relationships** - Click a level or attribute relationship to add it to the expression. Objects can also be drag and dropped into the Expression portion of the window. • **Members** - Another tool for building the expression is the Members folder. Click it to access the Select Filter Method window. From there, you can access the Select or Advanced Select Members window. This allows you to select specific members for the expression. Or, you can access the Named Set window and select a named set for the expression in cases when you are working with a single level time dimension.

When you add objects in this manner to the expression, they are added in MDX format. That format includes a reference to the object dimension and hierarchy. The standard MDX format for objects commonly used in expressions follows.

- **Level** - [Dimension name].[Hierarchy name].[Level name].members
- **Attribute Relationship** - [Dimension name].[Hierarchy name].Properties("Attribute Relationship name")
- **Member** - [Dimension name].[Hierarchy name].[Level name].[Member value]

Measure Items Folder – The Measure Items folder lists all the measure items associated with the view. Each measure item displays as Name (Caption). The name is the unique identifier associated with the measure item, which can be seen in the Properties window for the measure item. The caption makes it user friendly. They appear in the same order as in the view explorer.

You can include measure items as part of the expression using any of the following methods:

- Select measure items by clicking or drag and drop.
- Key in measure item names and captions directly in the Expression portion of the window in proper MDX format:

  [Measures].[Name(Caption)]

  where Name is the unique identifier that you can see for the measure item displayed in the Measure items folder of the expression window and Caption is the text that identifies the measure item in the view (caption also shows next to the Name for the measure item in the Measure Items folder).

MDX Functions Folder – A Functions folder provides you with logical, member, numeric, set, Stratum.Viewer-specific, tuple, and VBA functions that can be used for building the filter expression. You can select a function by clicking, double clicking, or drag and drop. You can also key in a function directly in the Expression portion of the window.

If you select a function for your expression, then the formula for it will display in the Expression section and each parameter will be enclosed in double arrows (<< >>). Function parameters enclosed in double arrows, such as «PARAMETER», are required. Parameters enclosed in brackets and double arrows, such as [«PARAMETER»], are optional. You can highlight each parameter and type over it directly in the Expression section. Or you can click the needed element from the tree structure in the window and it will be inserted into that section of the function.

Stratum.Viewer Functions Folder – This folder includes custom Stratum.Viewer functions that serve as shortcuts for building commonly used calculations, such as cumulative and percent of total functions. If you use them in an expression, they will be preceded by a pound sign (#) to distinguish them from standard MDX functions. The Stratum.Viewer specific functions are:

- ABC Cumulative Percent of Total
- ABC Cumulative Total
- Achievement Percent
- Count Member
- Cumulative Percent of Total
- Cumulative Total
- Divide With Zero Check
- Percent of Change
- Percent of Subtotal
- Percent of Total
- Total

	There are pop-up labels for all functions, and they give you a brief description of the functions.
2	**Expression** – Use this part of the window to build the expression for a filter on a level or an axis filter in the view. The MDX for objects selected from the View Items and Functions for Expression portion of the window display in this part of the window as you add them – add by clicking them or dragging and dropping them. You can also add objects to the expression by typing directly in the space provided in the Expression section of the window. Click the Examples link to see examples of expressions for different types of filters on levels or an axis in a view. **Note:** Objects not visible in a view or not part of a view definition can be used in an expression by manually entering them into the Expression portion of the window. You must refer to them by their valid MDX format and they must exist in the cube associated with the view.
3	**Filter Type** – When you access this window from a view to create a filter for a level, it will include a Filter Type button. Click it to access the Select Filter Method window if you need to apply a different type of filter to the level (Member List, User List, Named Set). **OK / Validate / Cancel –** Click the Validate button at any point while you are building the expression. Stratum.Viewer will verify that the format of your expression is valid. If you do not click the Validate button while building the expression, then validation will be performed once you click the OK button. Click OK to apply the expression filter. **Help** – Click to access examples of expressions for level or axis filters.

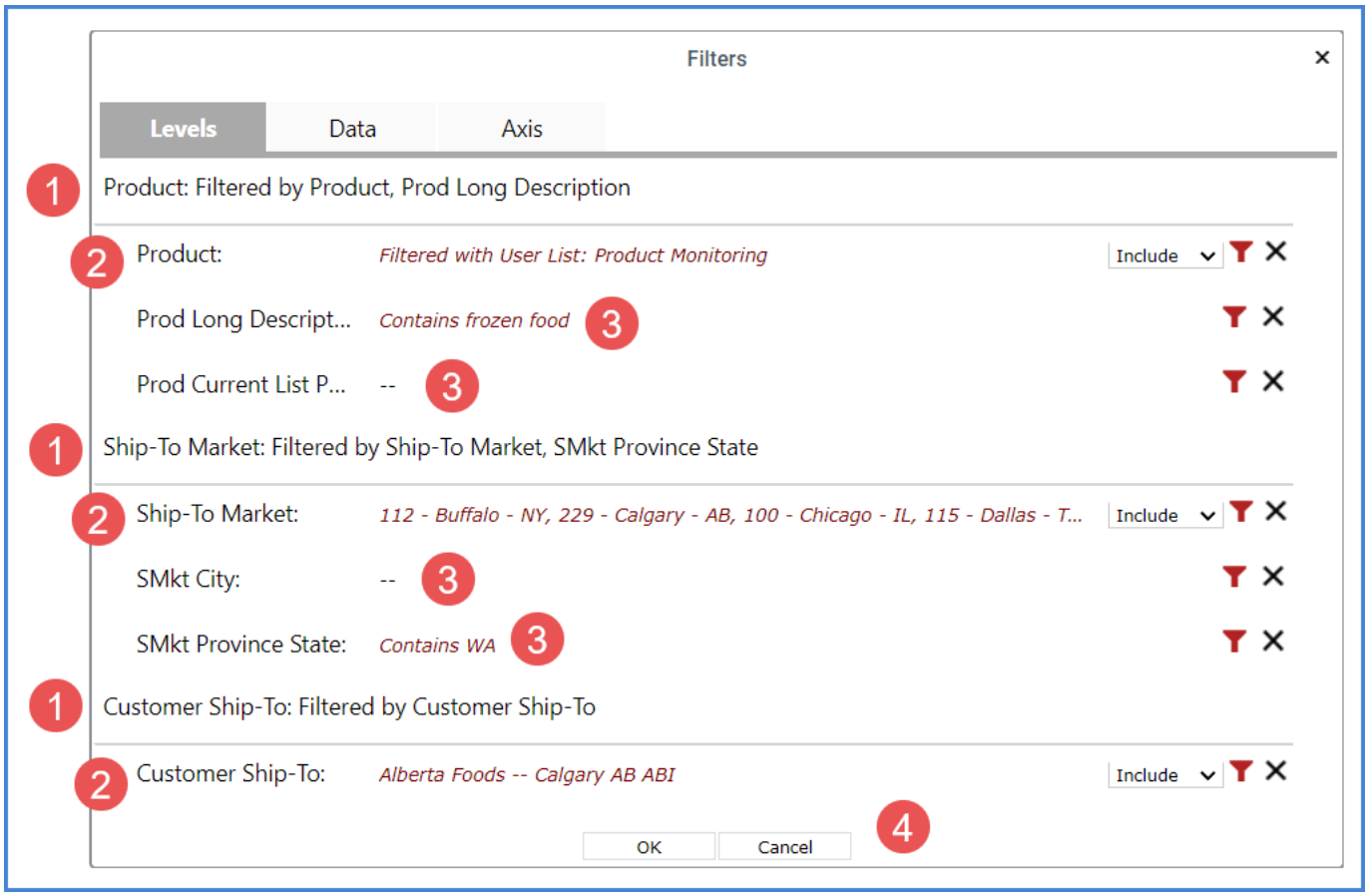
Filters Window

There are three tabs in this window, used to filter any part of your view. Click to see descriptions of each tab.

- Levels Tab
- Data Tab
- Axis Tab

Levels Tab

Levels can be filtered by their values and attributes. The first tab of the Filters window is for adding or editing those types of filters. Filter options are provided for level values and their individual attribute relationships in a view.



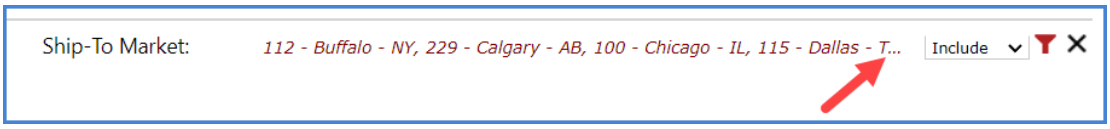
1	This tab is organized into sections for each level in a view except for hidden levels (those with Visible property set to No). The heading for each section includes the level caption and a summary of what filters exist. • **Filtered by** – This text displays if a level value or attribute relationship filter exists. The name of the filtered level and attributes appear after the text "Filtered by" in the section heading. • **Not filtered –** This text will display in a section heading for levels where the level does not have an active filter applied. For example, when a filter exists for a level, but the level isn't drilled to yet in the view at the time the Filters window was opened. Under each summary heading are the names of the level and attribute relationships displayed in the view for the level with their individual options to add, change, or remove their specific filters. More details follow about those features in this table's sections 2 and 3.

2

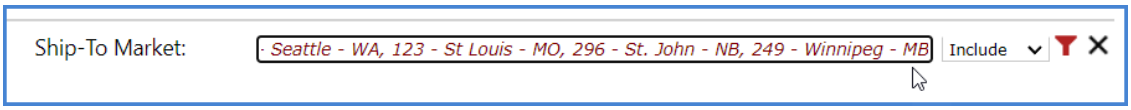
Sections for each level that shows in this tab include level value and attributes info. The value of the level displays as the first item under the level's section heading in the window. The level name will be followed by details about any filtering applied to the level's value.

- **Member Filter** – Member values in the filter will be listed after the level name. Ship-To Region and ABC Classification in the previous image have member filters applied to them.
- **User List Filter** – The text "Filtered with User List:" will display followed by the name of the user list. The Product level in the previous image has a user list filtered applied to it.
- **Named Set Filter –** The text "Filtered with Named Set:" will display followed by the name of the named set.
- **Expression Filter** – The text "Filtered with Expression:" will display followed by the expression.
- **Dash marks** – They display next to levels that do not have a member, user list, named set, or expression filter applied to them. This text also displays for cases where a level is filtered but not yet drilled to in the view at the time the Filters window was accessed.

If a level's value filter information has a series of dots "…" at the end of it, click the dots to activate a cursor. This enables you to scroll right and see the rest of the filter details for the level. In this example, the dots for a filtered Ship-To Market level were clicked.



A cursor displays so you can scroll right and see the names of the rest of the members in the Ship-To Market member filter.



Each level has icons available for adding, changing, or clearing filters for the respective level plus a drop-down list for determining if the level value filter will be applied in the Include or Exclude mode.

- **Filter Mode** – This drop-down list controls how Viewer applies the value filter (a member, user list, expression, or named set filter) on a level. Choosing "Include" means the applied filter will return only the members specified by your filter selections/criteria. "Exclude" means the applied filter will return all members ***except*** the ones specified by your filter selections/criteria. The mode choice is applicable to the level filter only. Attribute relationship filters are always applied as "Include".
- **Change Filter** – Click this icon to add or change filter selections or criteria. When you are setting up a new level filter, the Select Members window will display. If you want to set up a different type of filter than a member filter, click the More button then choose Change Filter Type and select the filter type from the Select Filter Method window that displays. If you click the icon to change a filter, the window for the type of filter applied to the level will display. For example, if the level has a user list filter applied to it, the Select User List Filter window will display.
- **Clear Filter** – Click this icon to remove a filter for a level.

3

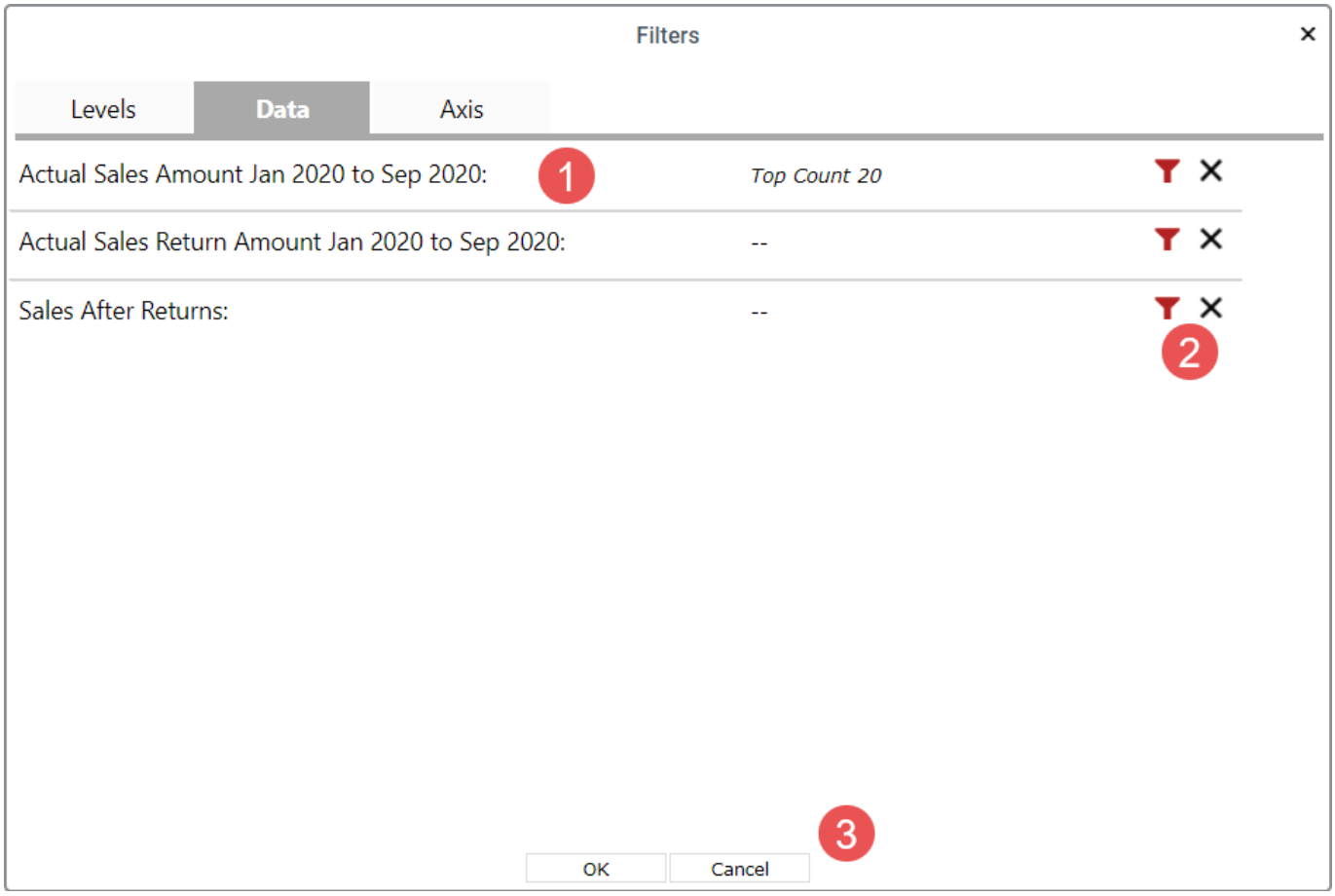
The attribute relationships in a view, except hidden ones (those with Visible property set to No), will display within the section for their level in the Levels tab of the Filters window. They display after the level value filter info. Each attribute's name will be followed by details about any filtering applied to that attribute.

The filter operator followed by its value will display. Possible filter types are:

- **Contains**

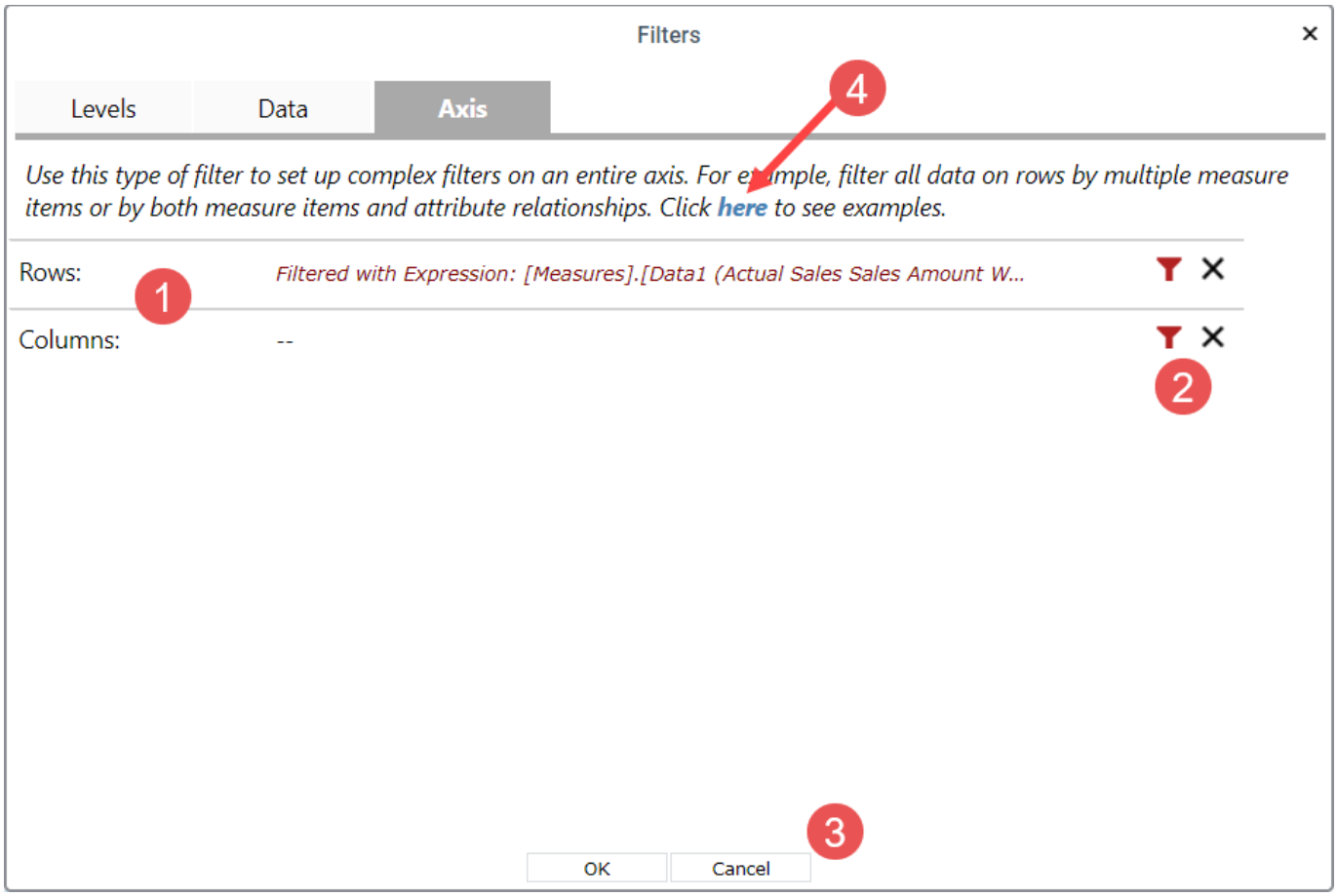
	• **Does not contain** • **Starts with** • **Does not start with** • **Equal to** • **Not equal to** • **Greater than** • **Greater than or equal to** • **Less than** • **Less than or equal to** Dash marks "--" display next to attribute relationships that do not have a filter applied to them. This text also displays for cases where an attribute relationship is filtered but its level is not yet drilled to in the view at the time the Filters window was accessed. If an attribute relationship's filter information has a series of dots "…" at the end of it, click the dots to activate a cursor. This enables you to scroll right and see the rest of the filter details. Each attribute relationship has icons available for adding, changing, or clearing filters for the respective attribute. • **Change Filter** – Click this icon to add or change a filter. The Attribute Relationship Filter window display. • **Clear Filter** – Click this icon to remove a filter for an attribute.
4	**OK** – Click OK to apply all the changes that you made in the Filters window. Changes made on any tabs will be applied to the view. **Cancel** – Click Cancel to close the window without applying your changes.

Data Tab



1	Each measure item included in the view will display in the Data tab of the Filters window. The measure item name will be followed by details about any filtering applied to the measure item. • **Top Count, Top Percent, Top Sum** • **Bottom Count, Bottom Percent, Bottom Sum** • **Recursive Top/Bottom Count, Percent, Sum** • **Overall Top / Bottom Count, Percent, Sum** • **Dash marks** display next to measure items that do not have a filter applied to them.
2	Each measure item has icons available for adding, changing, or clearing filters for the respective measure item. • **Change Filter** – Click this icon to add or change a filter. The Measure Item Filter window will display. • **Clear Filter** – Click this icon to remove a filter.
3	**OK** – Click OK to apply all the changes that you made in the Filters window. Changes made on any tabs will be applied to the view. **Cancel** – Click Cancel to close the window without applying your changes.

Axis Tab



1	Set up filters on the rows or columns axis using the Axis tab. Use axis filters when you need to set up filters involving multiple measure items or both measure items and attribute relationships. For example, use an axis filter to return all rows that fit the criteria of two different measure items -- such as all rows where Sales Units are greater than 1,000 and Profit Margin is less than 20%. • **Filtered with Expression** – If a filter exists, the filter expression displays next to the Rows and Columns section of this tab. • **Dash marks** – They display if an axis does not have a filter applied to it. If axis filter information has a series of dots "…" at the end of it, click the dots to activate a cursor. This enables you to scroll right and see the rest of the filter details for the axis. *Filtered with Expression: [Measures].[Data1 (Actual Sales Sales Amount W...*
2	Each axis has icons available for adding, changing, or clearing filters for the respective axis. • Change Filter – Click this icon to add or change a filter. The Expression window will display. • Clear Filter ✕ – Click this icon to remove a filter for an axis.

3	**OK** – Click OK to apply all the changes that you made in the Filters window. Changes made on any tabs will be applied to the view. **Cancel** – Click Cancel to close the window without applying your changes.
4	*Click **here** to see examples.* - Example expressions are available to review or even copy and paste into your expression definition.

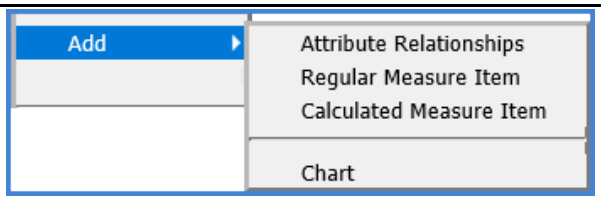
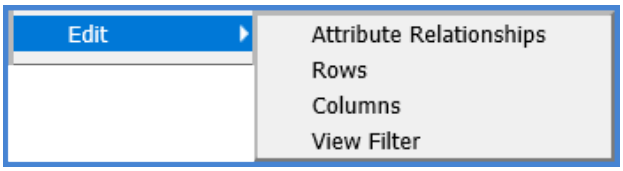
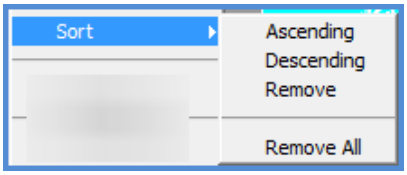
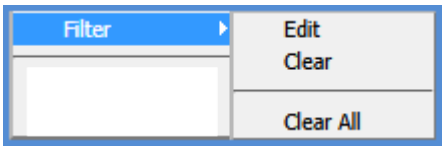
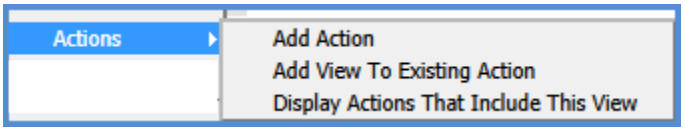
Grid Pop-up Menus

Right-click objects in views to display available functionality for them such as inserting measure items, transposing the grid, filtering objects in the grid, and so forth. Many of the functions can also be controlled through view explorer and the Properties window, giving you several ways to make changes. Options on pop-up menus vary by user. Your user profile level determines which options are available to you. The menus in these examples are for a user with an advanced level of access. Menus are displayed in alphabetical order.

Attribute Relationships Pop-up Menu

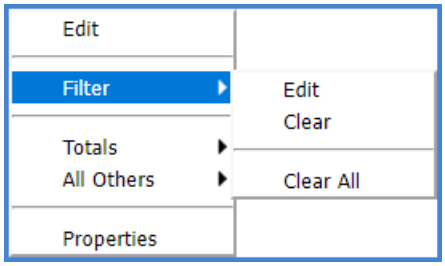
Right-click an attribute relationship to display actions that you can take related to that object or axis.

1	**More Info** – Opens more details about the attribute relationship in the Stratum Glossary.
2	**Copy** - This option allows you to copy sections of a view that you have selected. **Paste -** Allows you to paste data into update enabled cells. This option only shows in planning enabled views. **Select All -** Use this option to select the entire grid.
3	**Add** - The sub menu has options for adding Attribute Relationships, Regular Measure Items, Calculated Measure Items, and Charts. Windows for adding the selected type of item will display once you make your selection from this sub menu.

	 **Edit** - Edit the attribute relationships or edit hierarchies on the rows, columns, or view filter. 
4	**Hide** - When an attribute relationship is right-clicked and Hide is selected, the selected object is hidden from the grid. The Visible property for the attribute relationship changes to No. From view explorer, you can drag an attribute relationship back in the grid if needed, or you can change the Visible property to Yes.
5	**Sort** - Sort options are Ascending, Descending, Remove, and Remove All.  **Filter -** Filter options are Edit, Clear, and Clear All. 
6	**Actions** – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.  **Transpose** - Use this option to change the axis for levels and measure items in the grid. Objects displayed in columns are switched to display in rows and vice versa.
7	**View Explorer** - This option allows you to open and close view explorer. If the Properties window is open when you close view explorer, the Properties window will also close. **Properties -** Click to maintain the attribute relationship properties including sorting and whether it is visible or not.

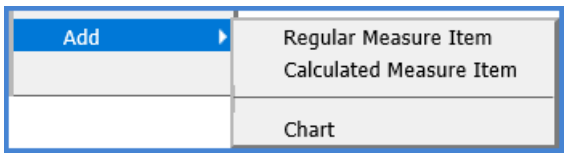
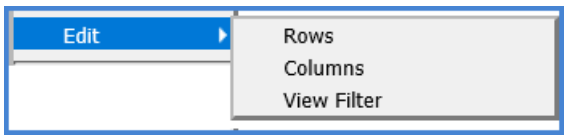
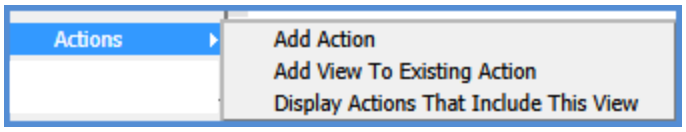
Axis Pop-up Menu

Right-click the Rows or Columns headings in the Navigation Panel (or their filter icon if an axis is filtered) to display a menu with options to edit properties of that axis including its filter, totals, or All Others properties. A shortcut to adding hierarchies to the Rows or Columns of a view is to click the Add icon + in those sections of the Navigation Panel.



General Pop-up Menu

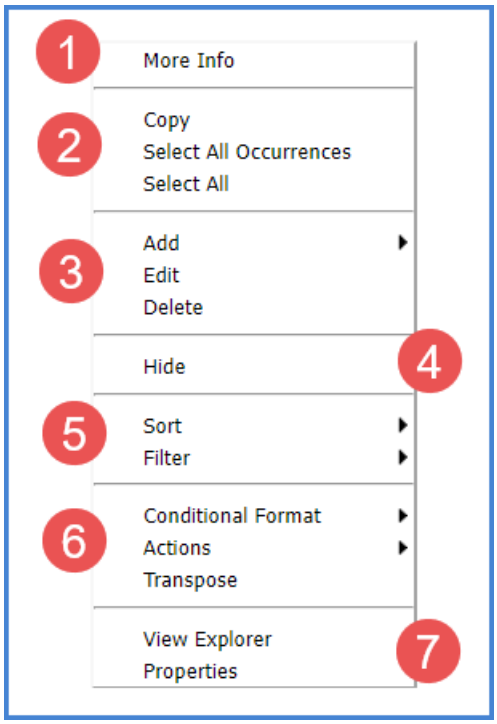
Right-click within the grid to display actions that you can take such as transposing the rows, columns, and measure items.

1	**Copy** - This option allows you to copy sections of a view that you have selected. **Paste -** Allows you to paste data into update enabled cells. This option only shows in planning enabled views. **Select All** - Use this option to select the entire grid.
2	**Add** - The sub menu has options for adding Regular Measure Items, Calculated Measure Items, and Charts. Windows for adding the selected type of item will display once you make your selection from this sub menu.  **Edit** - Edit the hierarchies on the rows, columns, or view filter. 
3	**Actions** – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.  **Transpose** - Use this option to change the axis for levels and measure items in the grid. Objects displayed in rows are switched to display in columns and vice versa.

4	**View Explorer -** This option allows you to open and close view explorer. If the Properties window is open when you close view explorer, the Properties window will also close.

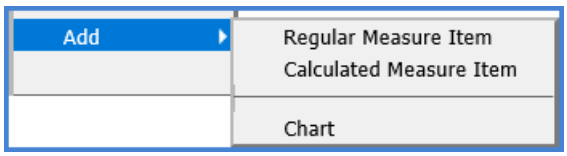
Measure Item Pop-up Menus (Detail and Grand Total Menus)

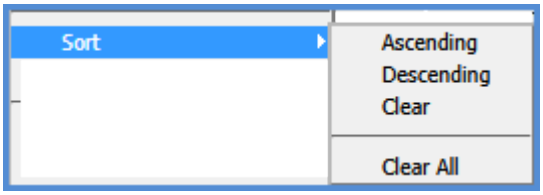
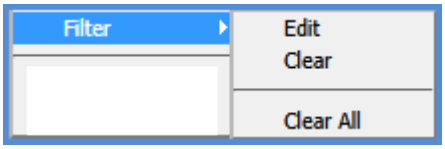
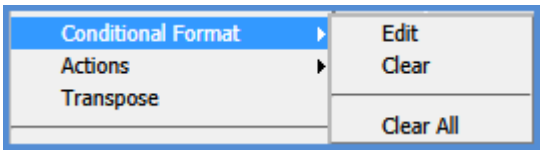
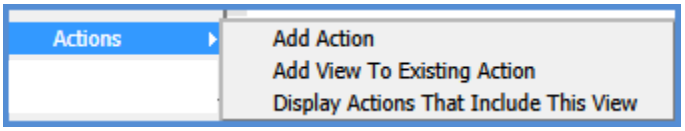
Measure items can be assigned to one axis, either rows or columns. Right-click the caption of a measure item in a detail row or column to display actions that you can take related to that object, such as inserting additional measure items or applying conditional formats.



Or, right-click the caption of a measure item in a Grand Total row or column to work with values in that area of a view, such as by applying sorts and filters to them.

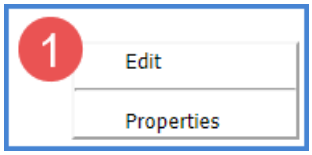
Descriptions follow of the menus for measure items in detail and Grand Total rows or columns.

1	**More Info** – Opens more details about the measure item in the Stratum Glossary.
2	**Copy** - This option allows you to copy sections of a view that you have selected. **Paste -** Allows you to paste data into update enabled cells. This option only shows in planning enabled views. This option does not display on the menu for Grand Totals. **Select All Occurrences** - Use this option to select data for all occurrences of that measure item in the active page of the View. This option does not display on the menu for Grand Totals. **Select All -** Use this option to select the entire grid.
3	**Add** - The sub menu has options for adding Regular Measure Items, Calculated Measure Items, and Charts. Windows for adding the selected type of item will display once you make your selection from this sub menu. 

	Edit - For regular measure items, opens the Edit Measure Item window with that measure item selected for editing. You can edit that measure item or any other regular measure items. For calculated measure items, opens an Edit window where you can edit the calculation, caption, and format for the calculated measure item. **Note:** You also can access editing windows for measure items from the Measure Items window, which is accessible from view toolbars, or by double-clicking the caption of the respective measure item in the view grid. **Delete** - Deletes the measure item from the view definition without confirmation. It will no longer display in the view explorer.
4	**Hide** - When a measure item is right-clicked and Hide is selected, the selected object is hidden from the grid. The Visible property for the measure item changes to No. From view explorer, you can drag a measure item back in the grid if needed, or you can change the Visible property to Yes.
5	**Sort** - Sort options are Ascending, Descending, Clear, and Clear All.  **Filter -** Filter options are Edit, Clear, and Clear All. 
6	**Conditional Format –** Use this option to edit or add conditional formatting on the measure item. There are also options for clearing the conditional format on the active measure item or all measure items.  **Actions** – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.  **Transpose** - Use this option to change the axis for levels and measure items in the grid. Objects displayed in columns are switched to display in rows and vice versa.
7	**View Explorer** - This option allows you to open and close view explorer. If the Properties window is open when you close view explorer, the Properties window will also close. **Properties -** Click to maintain the measure item properties including the name, caption expression, type, pop-up labels, hyperlinks, and so forth.

View Filter Pop-up Menu

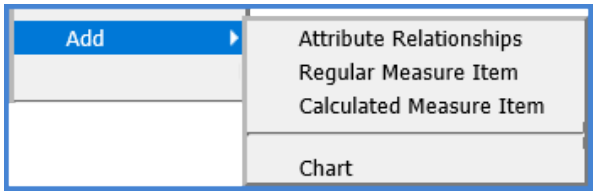
Right-click the View Filter heading to display actions that you can take related to that object or section of the grid, such as filtering levels in that section.

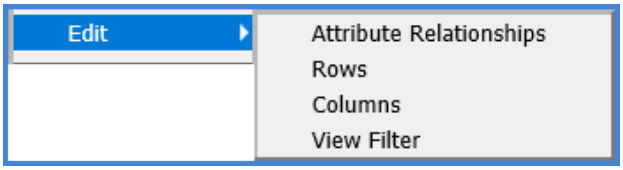
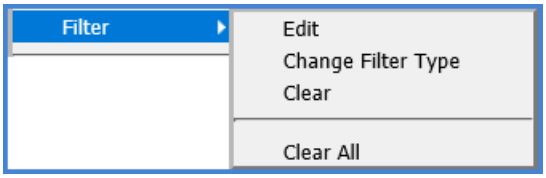
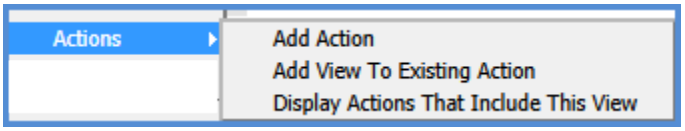


1	**Edit** - Edit the hierarchies in the view filter. A shortcut to adding hierarchies to the View Filter is to click the Add icon + that's provided in the View Filter section of the view.

Levels Pop-up Menu

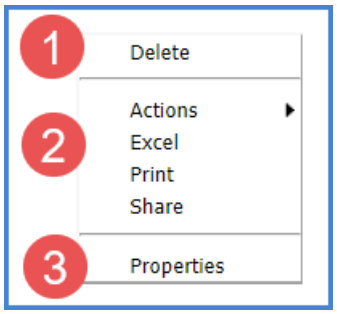
Right-click the level to display actions that you can take related to the level, such as editing the hierarchy.

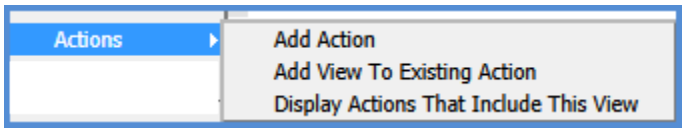
1	**More Info** – Opens more details about the level in the Stratum Glossary. If you right-click a level's member and choose More Info, you will see more details about that member such as its value and attribute relationships for the level.
2	**Copy** - This option allows you to copy sections of a view that you have selected. **Paste -** Allows you to paste data into update enabled cells. This option only shows in planning enabled views. **Select All -** Use this option to select the entire grid.
3	**Add** - The sub menu has options for adding Attribute Relationships, Regular Measure Items, Calculated Measure Items, and Charts. Windows for adding the selected type of item will display once you make your selection from this sub menu. 

	Edit - Edit the attribute relationships or edit hierarchies on the rows, columns, or view filter. 
4	**Hide** - When a level is right-clicked and Hide is selected, the selected object is hidden from the grid. The Visible property for the level changes to No. From view explorer, you can drag a level back in the grid if needed, or you can change the Visible property to Yes.
5	**Sort** - Sort options are Ascending, Descending, Clear, and Clear All. **Filter -** Filter options are Edit, Change Filter Type, Clear, and Clear All. Change Filter Type opens a window where you can select the type of filter to set up or change. By default, a new filter you create from the Filter > Edit option is a list of members from the level with which you are working. 
6	**Actions** – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.  **Transpose** - Use this option to change the axis for levels and measure items in the grid. Objects displayed in columns are switched to display in rows and vice versa.
7	**View Explorer** - This option allows you to open and close view explorer. If the Properties window is open when you close view explorer, the Properties window will also close. **Properties** - Click to maintain the level properties including the filter, sort, totaling, visibility, and display text.

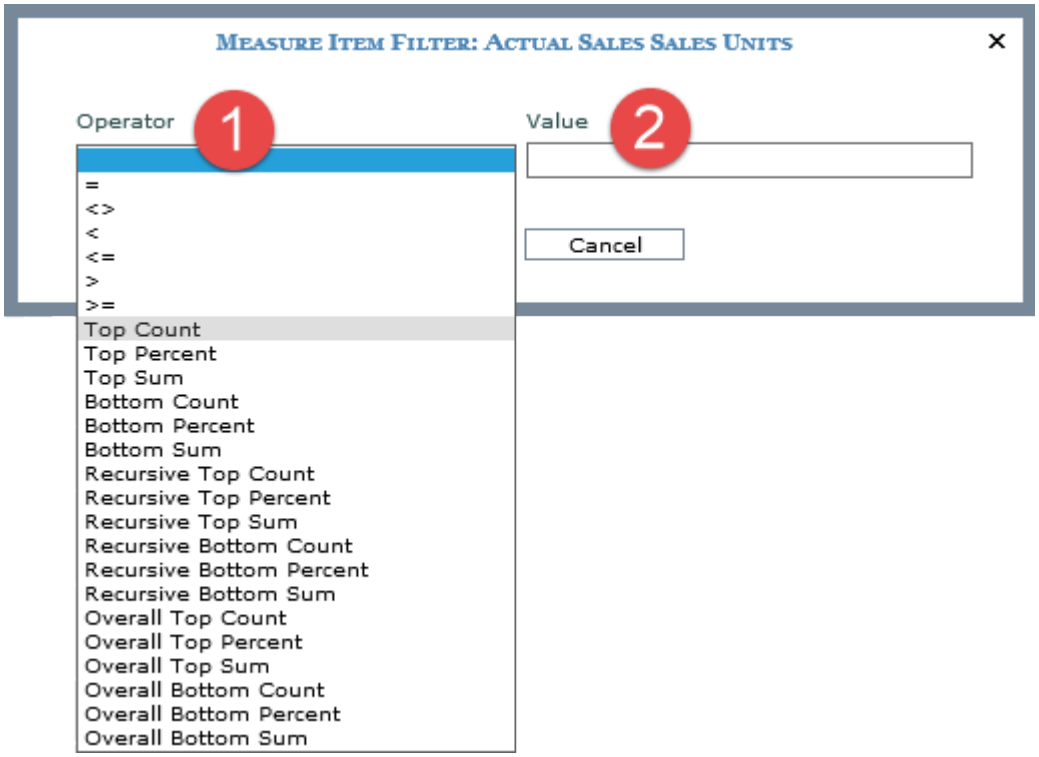
View Name Pop-up Menu

Right-click the view name to display actions that you can take related to the overall grid, such as exporting to Excel.



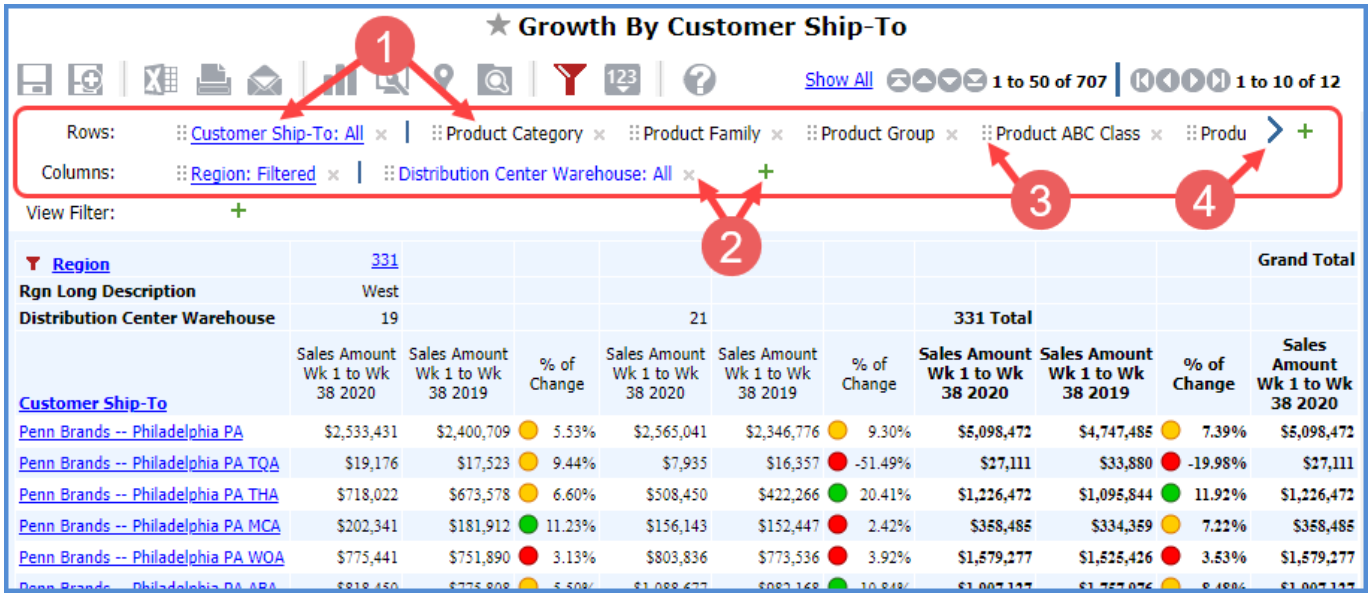
1	**Delete** - Choose Delete to delete the view with confirmation. Anyone can delete their own personal views, but only view and security administrators may delete global views.
2	**Actions** – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.  **Excel** - Click to initiate an export of the view to Microsoft Excel. **Print** - Click to print the active page of the view. **Share** – Click to open a window with the URL for the view. Click Copy to copy the URL to use for sharing with other Stratum users.
3	**Properties** - Click to maintain the view properties including the name, description, type and view group.

Measure Item Filter Window



1	**Operator list** - Choose what type of filter to apply, such as greater than or less than, top / bottom, recursive top / bottom, or overall top / bottom filters.
2	**Value list** - Type in the numeric value by which to filter the measure.

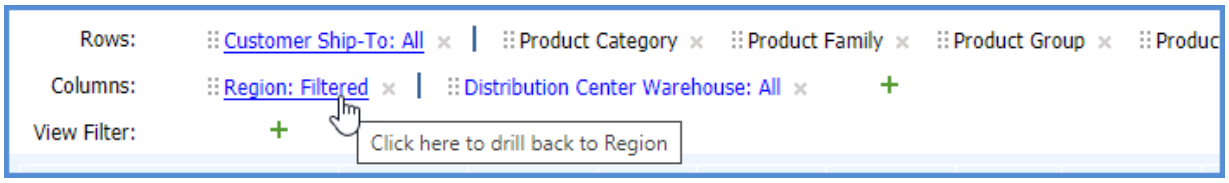
Navigation Panel



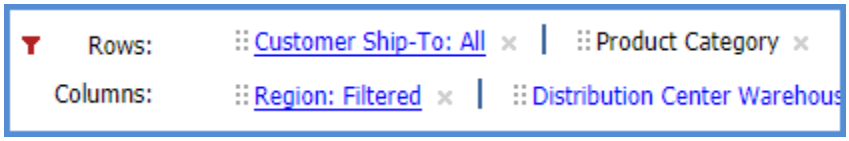
1

Active and Available Levels – The Rows and Columns section show all levels in the view.

- Active levels currently showing in the view display in blue. An underlined format means you can click the level to drill up or down, controlling what type of detail shows in the view. Hover text will tell you where the drill will take you.
- Levels that are available in the view to drill to but not actively showing in the view display in grey text. Levels with a Visible status set to No will not show up in the Navigation Panel.
- Filtered levels have the word "Filtered" after them.

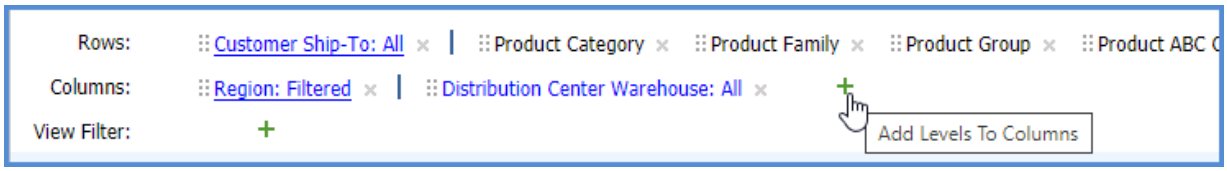


If an axis is filtered, a filter icon will show to the left of the section title.

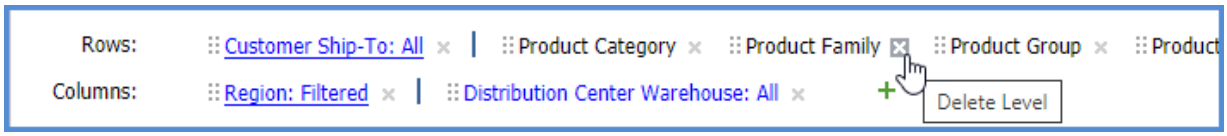


2

Add Levels – Click the Add Levels icon + for rows or columns to add levels to either section.

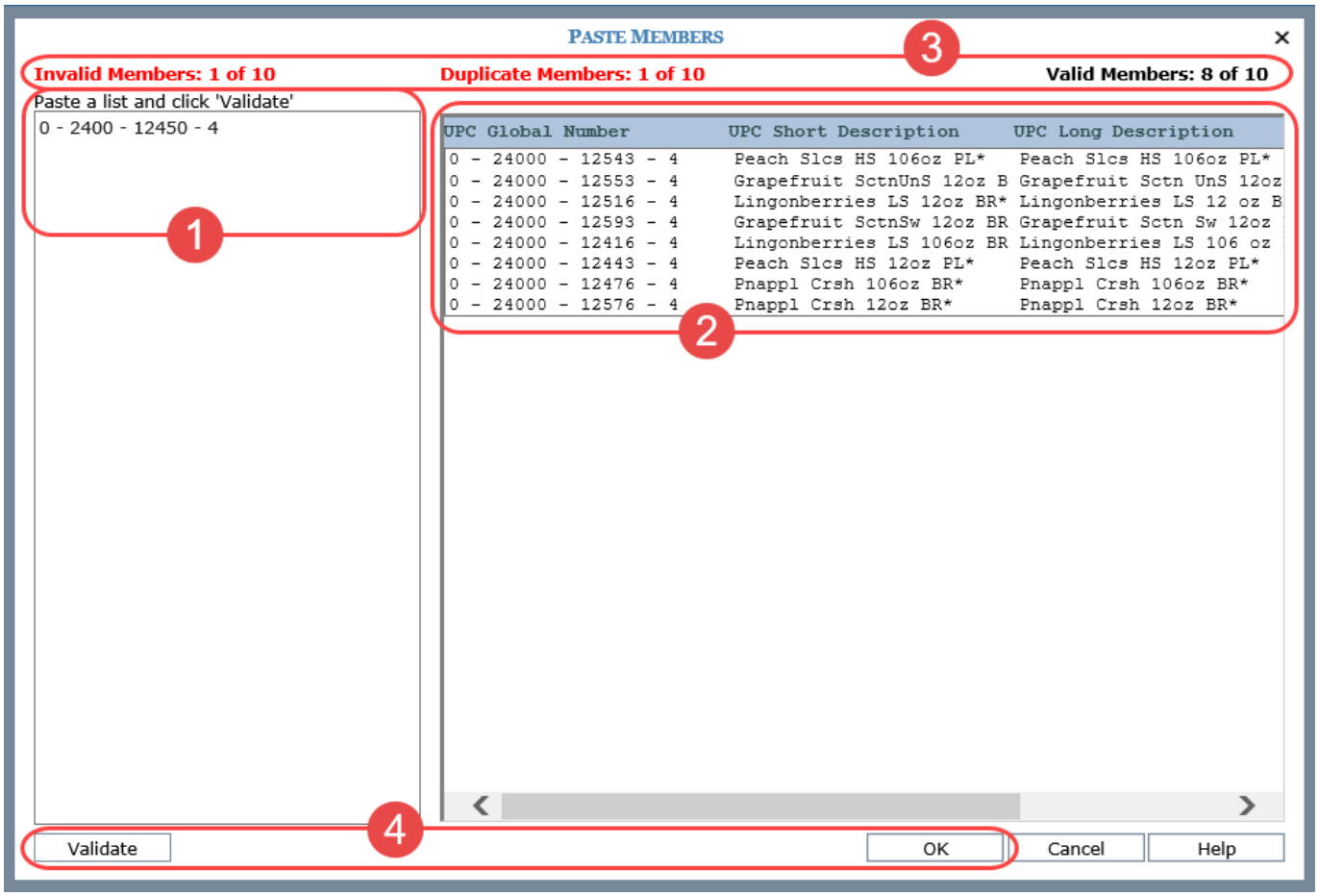


Delete Levels – Click the Delete Level icon × next to any level to delete that level from the view.



3	**Drag and Drop Levels** – You can move levels around in the view, changing whether they show on rows, columns, or the View Filter and changing what order levels display in on rows or columns. Click or tap the provided icon ⁞⁞ next to the level and then move the level to where you want it to show in the view.
4	**Scroll To See More Info** – Scrolling arrows are provided when there isn't enough space available in the browser to show all the levels that exist in a part of the Navigation Panel. You can scroll back or ahead to the rest of the information displayed in the panel.

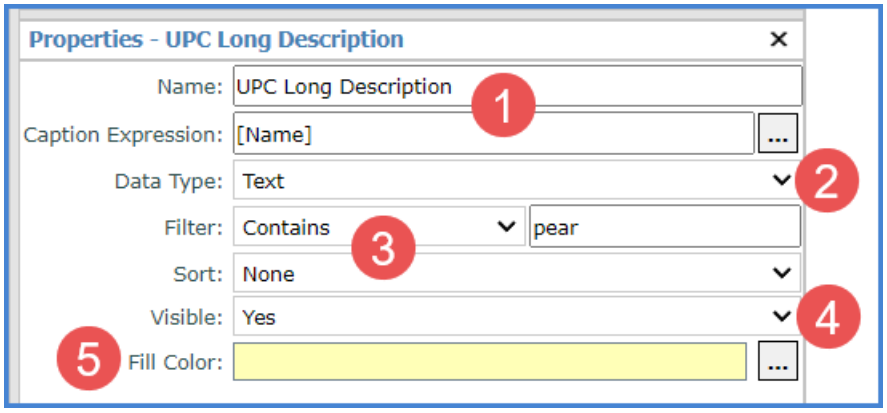
Paste Members Window



1	**Paste Members** – Use in combination with the Validate button to copy a list of members, validate the list, and then add valid members to the member list you are creating. Members copied into this section need to be separated by a carriage return. Examples of sources from which you can copy members would be a column in an Excel spreadsheet or list of members from a Stratum.Viewer view. You can also use a comma-delimited list from an email or text file.

2	**Validated Members -** This section is display-only**.** It is populated with valid members that were entered in the left portion of the window.
3	**Member Status** - Counts of invalid, duplicate, valid, and total members validated while using this window display at the top of the window.
4	**Validate** - Click to verify the pasted members are valid for the level with which you are working. Valid members are moved to the right side of the window. Invalid members remain in the left side of the window. Duplicate members are removed. Counts are updated in the member status displayed at the top of the window. **OK** - Click to return all valid member selections back to the main member filter window from which you accessed the Paste Members window, either the Select or Advanced Select Members window. Members identified for your filter via the Paste Members window will have their checkboxes selected in the Select Members window or show in the selected area at the bottom of the Advanced Select Members window. In that window, you can make adjustments such as sorting or removing some of the members from the member list with which you are working.

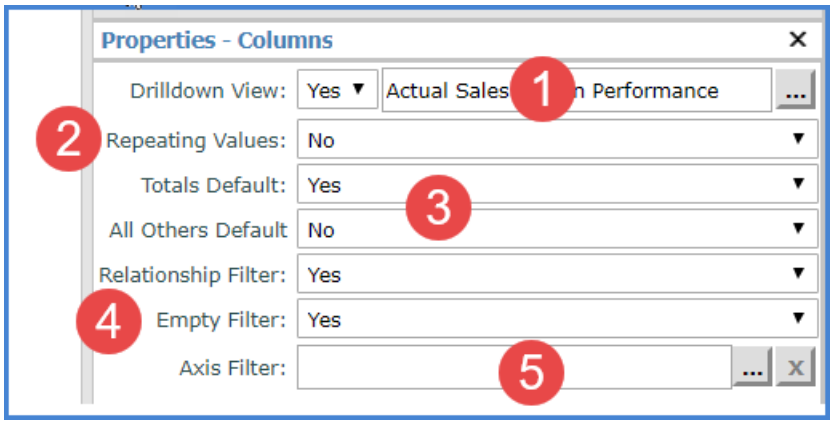
Properties Window for Attribute Relationships



1	**Name** – The name of the attribute. Used in the view explorer and filter windows. **Caption Expression** – A read only field that shows the expression behind the caption for an attribute relationship. The resolved text generated by the expression creates the caption, which is the text that displays for the attribute relationship in the view. The Caption Expression window can be accessed for editing the expression by clicking the Browse button ... next to the field. Attribute relationships will be referred to by their names in all other Stratum.Viewer locations that they appear, such as in view explorer and the Select Members window.
2	**Data Type –** Used to control whether the data for the attribute relationship is treated as Text or Number values in the active view. If set to Text, the data will display left aligned in its column and be treated as non-numeric data for filters and sorts. If set to Number, the data will display right aligned in its column and be treated as numeric for filters and sorts.
3	**Filter –** Use to add, edit, or remove a filter on an attribute relationship. Select the operator from the drop-down list and enter the value to filter by in the field next to the list. Pop-up labels showing filter criteria will show for the Filter field after a filter has been applied. **Sort** - Use to add, edit, or remove Ascending and Descending sorts.
4	**Visible –** Set this property to No to hide the attribute relationship in a view. Set this property to Yes to display the attribute relationship in a view.

5	**Fill Color** – Assign a fill color that will be used in the row or column containing the attribute relationship. This makes it stand out from the rest of the grid. Click the Browse button ... next to the Fill Color property to choose a color from the Color window. Or, if there is already a color selected and you don't want a fill color used anymore, select the No Color checkbox.

Properties Window for Columns

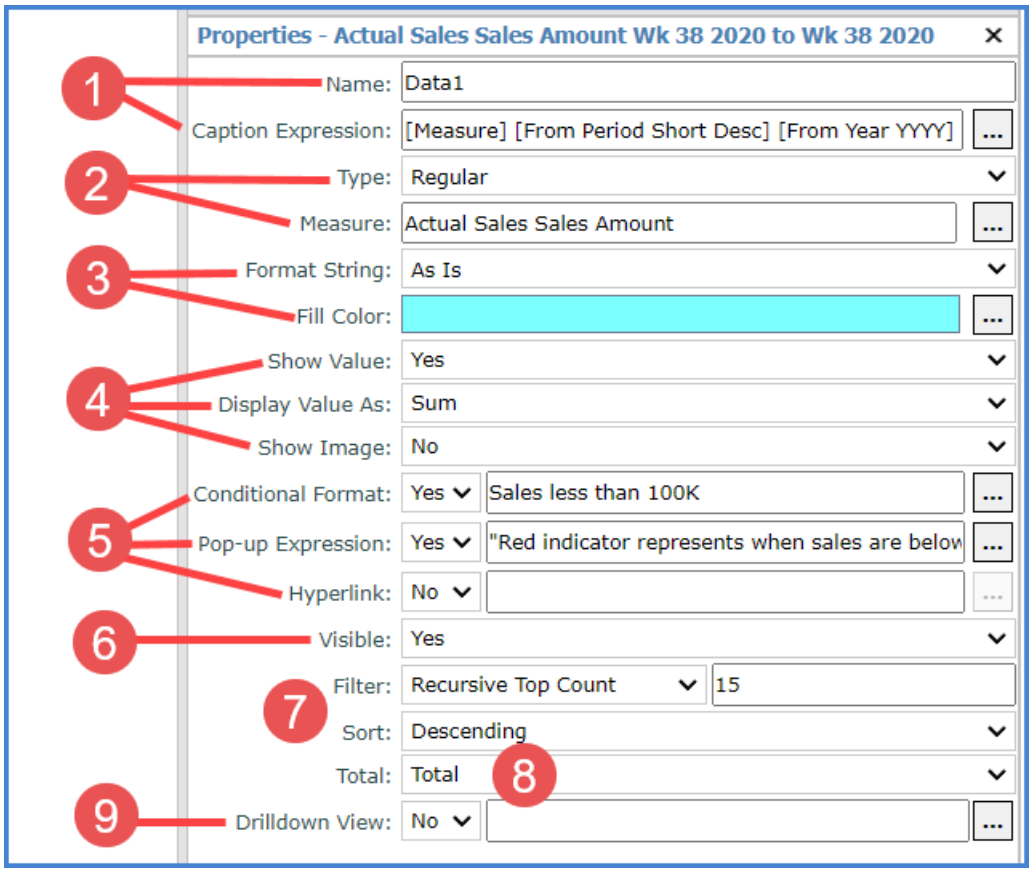


1	**Drilldown View** – Assign a drilldown view if you want to drill from the last level displayed on columns to another view, for example, to a view with related or complimentary data to the originating view. Choose Yes and then use the Select View window that displays to choose a view.
2	**Repeating Values** – Use to control whether or not duplicate column values display in the grid. Set the option to Yes if you want to see the following values repeated across the column detail cells in the grid: level display text, level attribute relationships, headings for All Others (if Others Summary is enabled), sub-totals, and grand totals. **Note:** This property also can be edited from the Display Options window in a view.
3	**Totals Default –** Use to control whether or not Totals display by default for new levels inserted on columns. Leave the property set to Yes if you want all new levels that are inserted on columns to have totals displayed for them. Change to No if you want totals to be disabled for all new levels that you insert on columns. You can control the totals settings for individual levels using the "Total" setting in a level's Properties window. **All Others Default –** Use to control whether or not All Others values display by default for new levels inserted on columns. Leave the property set to No if you do not want All Others values to display by default. Change to Yes if you want all new levels that are inserted on columns to have All Others values display. All Others values represent the sum of all members not in a filter. You can control the All Others settings for individual levels using the "All Others" setting in a level's properties window. **Note:** You also can enable or disable these properties for all levels on rows using the Display Options window in a view.
4	**Relationship Filter and Empty Filter** – When the Relationship Filter is set to Yes, only the members that have data for the measures and time ranges defined in the view will display. When the Relationship Filter is set to No, all members will be displayed. This allows you to see members with and without data for the measures and time ranges defined in the view. You can additionally use the Empty Filter property. In order for the Empty Filter property to be set to Yes, the Relationship Filter property must be set to Yes. The empty filter will remove any columns where no data exists, but that were not removed by the relationship filter. This can occur when there is a level filter on the axis opposite the measure item axis.

5	**Axis Filter** – Use to work with an axis filter on columns: • Click the Browse button ... to add or edit a filter on the columns axis. An Expression window displays for setting up the filter. A pop-up label for this field displays expression criteria for an existing filter. • Click the "X" button to remove a filter.

Properties Window for Individual Measure Items

Regular Measure Items

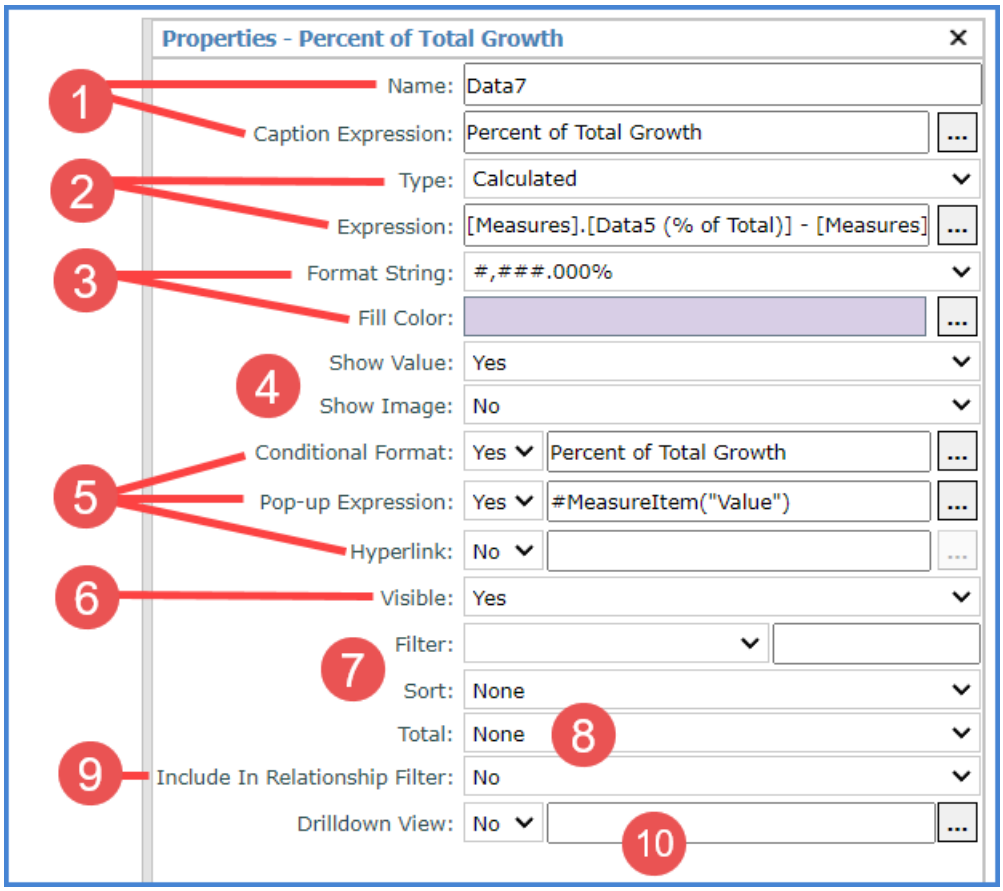


1	**Name** – The text in this field determines the unique name that Stratum.Viewer will use to identify a measure item in the view. You can edit this field as needed. Default names given to new measure items are DataN. The "N" is a sequential number assigned by Stratum.Viewer to create a unique name. You will be prompted to make corrections to the name if you enter a duplicate name, use any spaces in the name, use too many characters (more than 50), or use invalid characters. **Caption Expression** - A read only field that shows the expression behind the caption for a measure item. The resolved text generated by the expression creates the caption, which is the text that displays for the measure item in the view and other areas of the application such as view explorer. The Caption Expression window can be accessed for editing the expression by clicking the Browse button next to the field.
2	**Type** – This property shows the type of measure item you are working with – either regular, calculated, or distinct calculated. The property will be set to "Regular" if you are inserting or editing a regular measure item.

	Note: See the next table for information about calculated and distinct calculated types. **Measure** – This field is a read only field that displays the underlying measure you selected when setting up the regular measure item. • For measure items with time ranges, clicking the Browse Button next to the Measure field opens the Edit Measure Item window. Use that window to edit the measure item's underlying measure or time range. The main Time Range property for a view must be set to Yes for the Properties window to behave in this manner. • For measure items without time ranges, clicking the search button next to the Measure field opens the Select Measure window for editing the underlying measure. The main Time Range property for a view must be set to No for the Properties window to behave in this manner.
3	**Format String** – Use this drop-down list to apply a format such as decimal places, monetary symbols, commas, or a combination of formatting. **Fill Color** – Assign a fill color that will be used in the column or row containing the measure item. This makes it stand out from the rest of the grid. Click the Browse button next to the Fill Color property to choose a color from the Color window. Or, if there is already a color selected and you don't want a fill color used anymore, select the No Color checkbox.
4	**Show Value –** Determines if the measure item value displays in the Viewer grid. Set to Yes to display value. Set to No to hide the value, for example, in cases where you want to display only the conditional format icon for a measure item. **Display Value As** – This drop-down list only displays for measure items with time ranges. This property defaults to Sum, and its other options can be used to create Key Performance Indicators (KPIs) based on the selected measure. • **Sum** - The sum of the values for the measure item within the specified time range. This is the default and most commonly used setting for this property. • **Min** - The minimum value for the measure item within the specified time range. • **Max** - The maximum value for the measure item within the specified time range. • **Avg** - The average value for the measure item within the specified time range. • **Med** - The median value for the measure item within the specified time range. • **StdDev** - The Standard deviation of the measure item values within the specified time range. The standard deviation is the average amount of variability in your dataset. It tells you, on average, how far each value lies from the mean. • **Variance** - The measure of dispersion of data points from the mean for measure item values within the specified time range. Low variance indicates that data points are generally similar and do not vary widely from the mean. High variance indicates that data values have greater variability and are more widely dispersed from the mean. **Show Image** – This property is used when setting up calculated measure items that display images. See the next table for information about this property.
5	**Conditional Format** – Controls the display of icons, and cell and text formatting for the measure item by applying the conditional format rules. The Browse button is only enabled when the Conditional Format field is set to Yes. When enabled, you can click the button to access the Select Conditional Format window to edit the conditional format associated with the measure item or create a new one. The name of the selected conditional format displays in the text box left of the icon. **Pop-up Expression** – Use this property to specify whether the selected measure item has a pop-up label that will display when you hover over the measure item value, indicator, or image. The Browse

	button ... is only enabled when the Pop-up Expression field is set to Yes. When enabled, you can click the button to access the Pop-up Label Expression window to edit the existing expression or create a new one. The active pop-up expression displays in the text box left of the ... icon. **Hyperlink** – Choose Yes if you want a hyperlink defined for the cell of a measure item. The Browse button ... is only enabled when the Hyperlink field is set to Yes. When enabled, you can click the button to access the Hyperlink Expression window to edit the expression or create a new one. The hyperlink defined displays in the text box left of the ... icon.
6	**Visible** – Set this property to No to hide the measure item in the view. Set this property to Yes to display the measure item in the view.
7	**Filter and Sort** – Use to add, edit, or remove filters and sorts. For filters, select the operator from the drop-down list and enter the value to filter by in the field next to the list. Pop-up labels showing filter criteria will show for the Filter field after a filter has been applied. If your view has levels on the same axis as measure items, these properties will be disabled until you have applied an initial filter or sort via the grid.
8	**Total** – Use to control the type of total that is performed for a measure item. The default setting for all measure items is Total. • **None** – No total will be displayed. • **Total** – This designation takes into account any underlying calculations for a measure item's definition when generating Grand Totals, sub-totals, and All Others – such as calculations defined in a measure item expression or associated with a Stratum.Planner calculated value. • **Sum** – This designation means that Viewer will generate totals by adding the values displayed in measure item detail cells. That summing will be used to generate the Grand Totals, sub-totals, and All Others. This type of total is intended for special cases where you don't want any of the underlying calculations that Viewer performs to be used when generating total values. You might choose to use a Sum total when a measure item calculation includes an IIF statement, such as a calculation with IF, Then, Else conditions.
9	**Drilldown View** - Assign a drilldown view if you want to drill from this measure item to another view, for example, to a view with related or complimentary data to the originating view. Choose from views that you normally have access to in the application. If you select a Drilldown view for both the measure items axis and an individual measure item, the selection for the individual measure item takes precedence.

Calculated and Distinct Calculated Measure Items

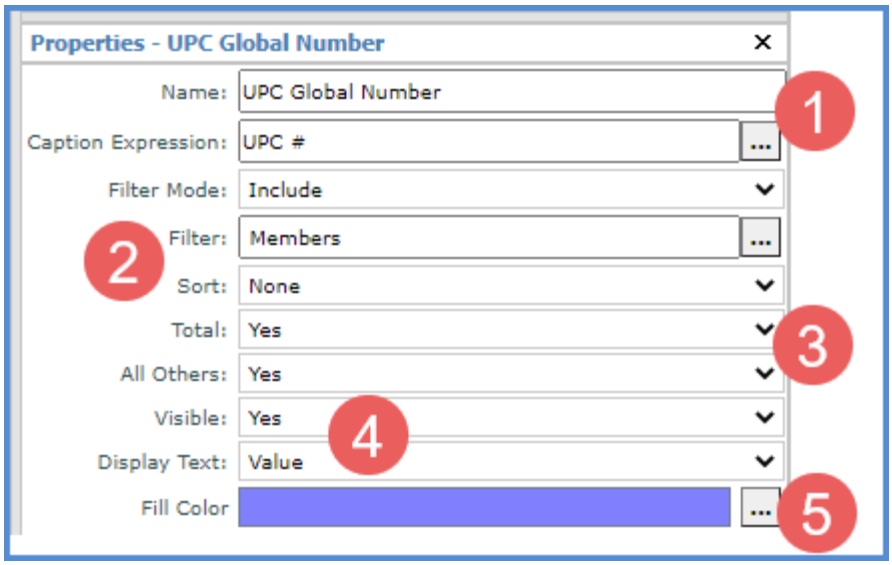


1	**Name** – The text in this field determines the unique name that Stratum.Viewer will use to identify a measure item in the view. You can edit this field as needed. Default names given to new measure items are DataN. The “N” is a sequential number assigned by Stratum.Viewer to create a unique name. You will be prompted to make corrections to the name if you enter a duplicate name, use any spaces in the name, use too many characters (more than 50), or use invalid characters. **Caption Expression** – A read only field that shows the expression behind the caption for a measure item. The resolved text generated by the expression creates the caption, which is the text that displays for the measure item in the view and other areas of the application such as view explorer. The Caption Expression window can be accessed for editing the expression by clicking the Browse button next to the field.
2	**Type** – This property shows the type of measure item you are working with – either regular, calculated, or distinct calculated. The property will be set to “Calculated” or “Distinct Calculated” if you are inserting or editing that type of measure item. **Note:** See the previous table for information about regular types. **Expression** – When "Calculated" or "Distinct Calculated" is the measure item type, an Expression field shows in this window. It's a read only field that shows the expression for calculating the measure item. The Expression window can be accessed for editing the expression by clicking the Browse button ... next to the field. Note that when you are using a calculated measure item to display images in a view that the expression will determine the location/name of the image file for Stratum.Viewer to display.

	• The image file must reside in the Stratum.Viewer application folders. It is recommended that all custom images reside in a subfolder of the Images folder of the Stratum.Viewer application. • Supported file types for images are *.jpg, *.jpeg, *.png, *.bmp, *.gif, *.tif, and *.tiff. • The image will display according to its original, default size.
3	**Format String** – Use this drop-down list to apply a format such as decimal places, monetary symbols, commas, or a combination of formatting. **Fill Color** – Assign a fill color that will be used in the column or row containing the measure item. This makes it stand out from the rest of the grid. Click the Browse button ... next to the Fill Color property to choose a color from the Color window. Or, if there is already a color selected and you don't want a fill color used anymore, select the No Color checkbox.
4	**Show Value –** Determines if the measure item value displays in the Viewer grid. Set to Yes to display value. Set to No to hide the value, for example, in cases where you want to display only the conditional format icon for a measure item. **Show Image** – This property is used when setting up calculated measure items that display images. You use the Expression window to define the location of the image and then set this property to Yes in order for the defined image to display in the grid. See item 2 above.
5	**Conditional Format** – Controls the display of icons, and cell and text formatting for the measure item by applying the conditional format rules. The Browse button ... is only enabled when the Conditional Format field is set to Yes. When enabled, you can click the button to access the Select Conditional Format window to edit the conditional format associated with the measure item or create a new one. The name of the selected conditional format displays in the text box left of the ... icon. **Pop-up Expression** – Use this property to specify whether the selected measure item has a pop-up label that will display when you hover over the measure item value, indicator, or image. The Browse button ... is only enabled when the Pop-up Expression field is set to Yes. When enabled, you can click the button to access the Pop-up Label Expression window to edit the existing expression or create a new one. The active pop-up expression displays in the text box left of the ... icon. **Hyperlink** – Choose Yes if you want a hyperlink defined for the cell of a measure item. The Browse button ... is only enabled when the Hyperlink field is set to Yes. When enabled, you can click the button to access the Hyperlink Expression window to edit the expression or create a new one. The hyperlink defined displays in the text box left of the ... icon.
6	**Visible** – Set this property to No to hide the measure item in the view. Set this property to Yes to display the measure item in the view.
7	**Filter and Sort** – Use to add, edit, or remove filters and sorts. For filters, select the operator from the drop-down list and enter the value to filter by in the field next to the list. Pop-up labels showing filter criteria will show for the Filter field after a filter has been applied. If your view has levels on the same axis as measure items, these properties will be disabled until you have applied an initial filter or sort via the grid.
8	**Total** – Use to control the type of total that is performed for a measure item. The default setting for all measure items is Total. • **None** – No total will be displayed.

	• **Total** – This designation takes into account any underlying calculations for a measure item's definition when generating Grand Totals, sub-totals, and All Others – such as calculations defined in a measure item expression or associated with a Stratum.Planner calculated value. • **Sum** – This designation means that Viewer will generate totals by adding the values displayed in measure item detail cells. That summing will be used to generate the Grand Totals, sub-totals, and All Others. This type of total is intended for special cases where you don't want any of the underlying calculations that Viewer performs to be used when generating total values. You might choose to use a Sum total when a measure item calculation includes an IIF statement, such as a calculation with IF, Then, Else conditions.
9	**Include In Relationship Filter** – Defaults to No and is recommended in most cases for optimizing calculations, especially those use include attribute relationships in their expressions. That default makes for the most efficient calculation performance and gives you a more focused result set. The default makes sure the calculation is only carried out for members in the view that have data for the applicable measure item used in the calculation.
10	**Drilldown View** - Assign a drilldown view if you want to drill from this measure item to another view, for example, to a view with related or complimentary data to the originating view. Choose from views that you normally have access to in the application. If you select a Drilldown view for both the measure items axis and an individual measure item, the selection for the individual measure item takes precedence.

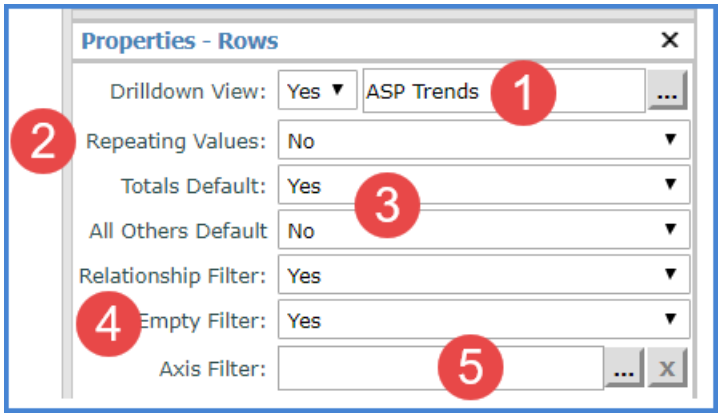
Properties Window for Levels



1	**Name** – Name of the level. Used in the view explorer and filter windows. **Caption Expression** – A read only field that shows the expression behind the caption for a level. The resolved text generated by the expression creates the caption, which is the text that displays for the level in the view. The Caption Expression window can be accessed for editing the expression by clicking the Browse button ... next to the field. Levels will be referred to by their names in all other Stratum.Viewer locations that they appear, such as in view explorer and the Select Members window.
2	**Filter and Sort** - Use to add, edit, or remove filters and sorts. • **Filter Mode** – This property controls how Viewer treats a member list, user list, expression, or named set filter. The "Include" option means the applied filter returns only the members

	specified by your filter selections/criteria. “Exclude” means the applied filter returns all members ***except*** the ones specified by your filter selections/criteria. • **Filter** - click the Browse button ... to access the Select Filter Method window and either add or change a filter. If a filter already exists, the filter type displays in this field and a pop-up label shows filter criteria. • **Sort** - use the list provided to add Ascending or Descending sorts or to change or remove a sort.
3	**Total** – Use to control whether or not Total values display for the level. When the property is Yes, totals will display for the level, When the property is No, totals will not display. **All Others** – Use to control whether or not All Others values display for the level. All Others values represent the sum of all members not in a filter. When the property is Yes, All Others values will display for the level, When the property is No, All Others will not display.
4	**Visible –** Set this property to No to hide the level in a view. Set this property to Yes to display the level in a view. **Display Text** – This property controls what displays in the first row or column for the level. The default is the level value. You can change it to any of the attribute relationships that have been made available in the view for the level.
5	**Fill Color** – Assign a fill color that will be used in the row or column containing the level. This makes it stand out from the rest of the grid. Click the Browse button ... next to the Fill Color property to choose a color from the Color window. Or, if there is already a color selected and you don’t want a fill color used anymore, select the No Color checkbox.

Properties Window for Rows



1	**Drilldown View** – Assign a drilldown view if you want to drill from the last level displayed on rows to another view, for example, to a view with related or complimentary data to the originating view. Choose Yes and then use the Select View window that displays to choose a view.
2	**Repeating Values** – Use to control whether or not duplicate row values display in the grid. Set the option to Yes if you want to see the following values repeated across the row detail cells in the grid: level display text, level attribute relationships, headings for All Others (if Others Summary is enabled), sub-totals, and grand totals. **Note:** This property also can be edited from the Display Options window in a view.
3	**Totals Default** – Use to control whether or not Totals display by default for new levels inserted on rows. Leave the property set to Yes if you want all new levels that are inserted on rows to have totals displayed for them. Change to No if you want totals to be disabled for all new levels that you insert on rows. You can control the totals settings for individual levels using the "Total" setting in a level's Properties window. **All Others Default** – Use to control whether or not All Others values display by default for new levels inserted on rows. Leave the property set to No if you do not want All Others values to display by default. Change to Yes if you want all new levels that are inserted on rows to have All Others values display. All Others values represent the sum of all members not in a filter. You can control the All Others settings for individual levels using the "All Others" setting in a level's properties window. **Note:** You also can enable or disable these properties for all levels on rows using the Display Options window in a view.
4	**Relationship Filter and Empty Filter** – When the Relationship Filter is set to Yes, only the members that have data for the measures and time ranges defined in the view will display. When the Relationship Filter is set to No, all members will be displayed. This allows you to see members with and without data for the measures and time ranges defined in the view. You can additionally use the Empty Filter property. In order for the Empty Filter property to be set to Yes, the Relationship Filter property must be set to Yes. The empty filter will remove any rows where no data exists, but that were not removed by the relationship filter. This can occur when there is a level filter on the axis opposite the measure item axis.
5	**Axis Filter** – Use to work with an axis filter on rows:

	• Click the Browse button ... to add or edit a filter on the rows axis. An Expression window displays for setting up the filter. A pop-up label for this field displays expression criteria for an existing filter. • Click the "X" button to remove a filter.

Properties Window for View Filter

There are no properties for this folder in view explorer. If there are levels in the View Filter, they will each have their own properties window. See Properties Window for Levels.

Select Filter Method Window

Only the Member List and Named Set options display when the window is accessed from the Expression window:

1	**Filter Methods** - Choose None then click OK if you are removing a filter. To apply or change a filter, select an option and click OK or use the quick filter option noted in item 2. • **Member List** - clicking OK after selecting this option opens the Select or Advanced Select Members window. Search for and select members for the filter.

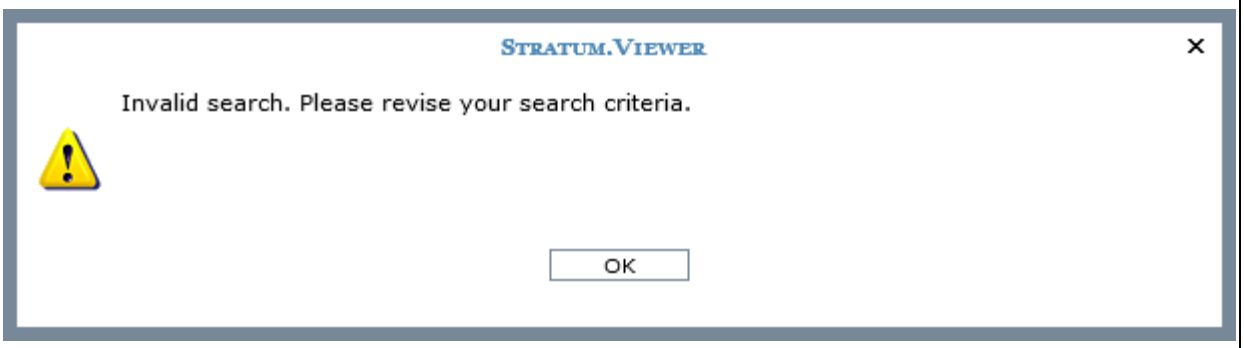
- **User List** - clicking OK after selecting this option opens the Select User List Filter window. Use the search or filter tools as aids in finding a list. Optionally click Show Details after selecting a list to see more information about it before applying it as a filter. Click OK to apply the selected list as a filter.
- **Named Set** - clicking OK after selecting this option opens the Select Named Set Filter window. Select a named set for the filter.
- **Expression** - clicking OK after selecting this option opens the Expression window. Set up an expression for the filter.

2

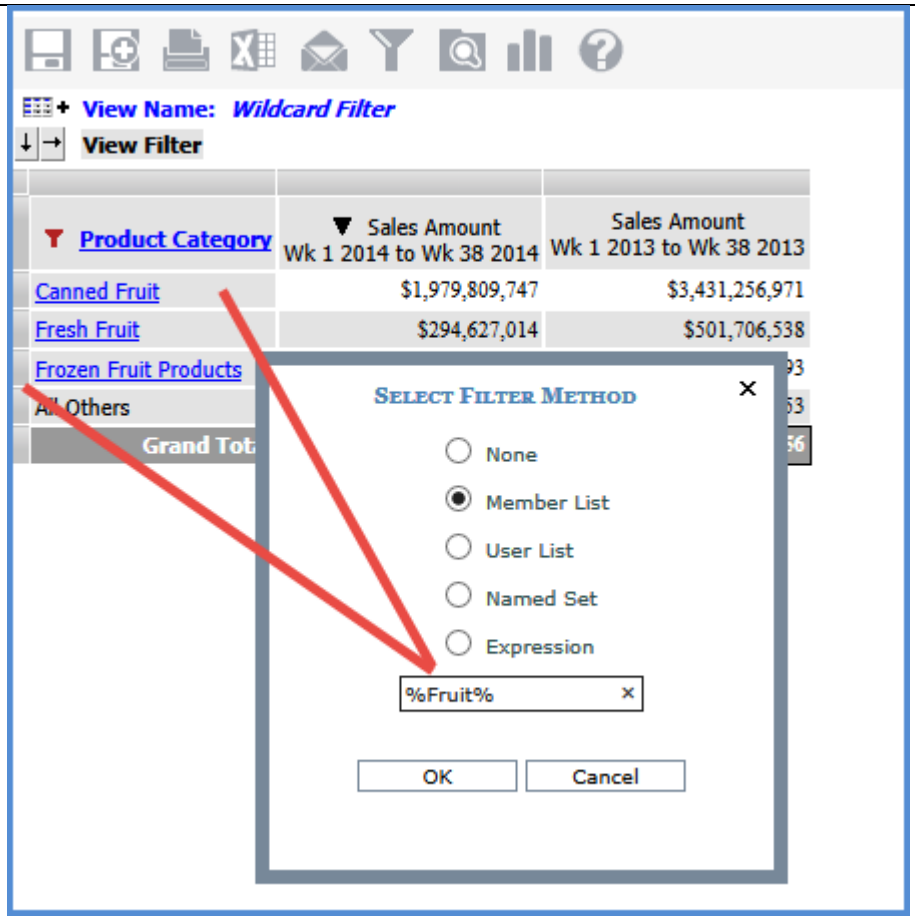
Quick Filter Field – Perform a quick filter by selecting Member List, using this field to specify the level members, then clicking OK. Separate the values in the field by semicolons and do not use any spaces between the values and semicolons.

When using this method and working in a view, you need to refer to members based on the level's display text. For example, enter member values if the level display text is set to Value or enter member attribute relationships if the level display text is set to one of its attribute relationships. Here is a quick filter specified for three Ship-To Markets. The values entered in the field were Chicago;Dallas;Phoenix because the Ship-To Market display text is set to SMkt City:

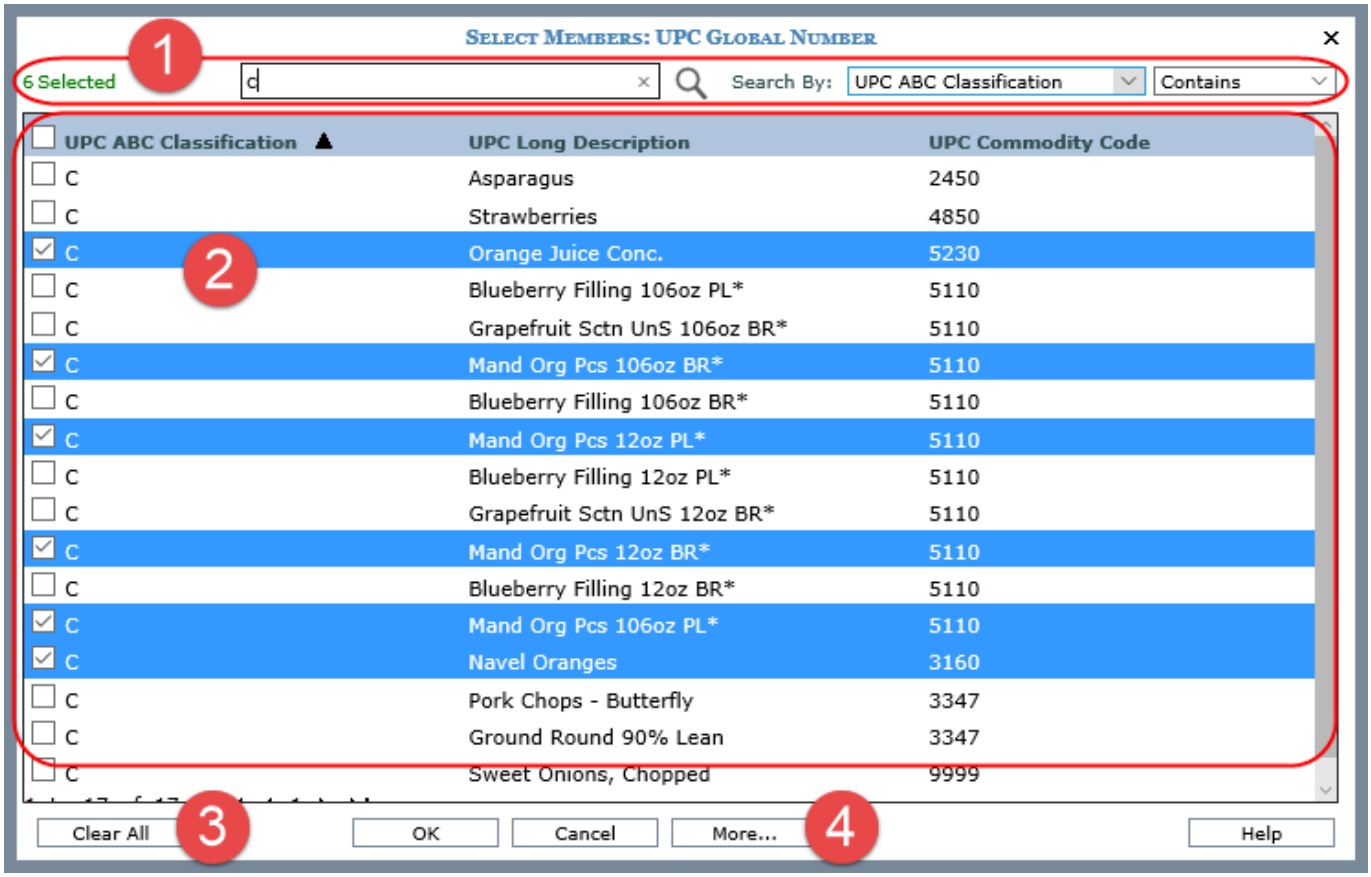
You will see the following message if you do not refer to members based on their display text setting, if you enter members not applicable to the level, or if you enter members that your role permissions do not permit you to see.



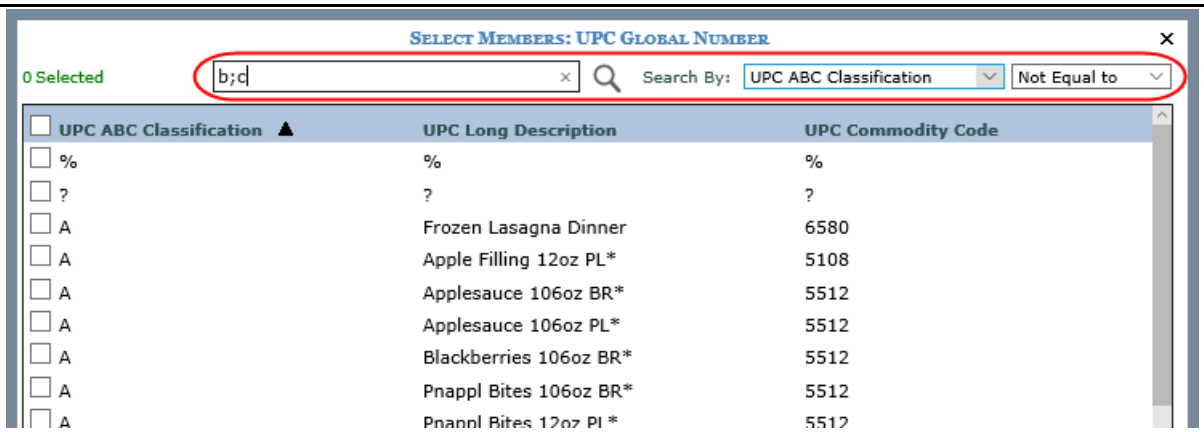
You can enter wildcard criteria in the Quick Filter field. In this example, the Member List option is selected and Product Category has been quick filtered by a wildcard search of %Fruit%. Categories with “Fruit” in their display text were returned by the filter.


View Name: Wildcard Filter
View Filter
Product Category
Sales Amount Wk 1 2014 to Wk 38 2014
Sales Amount Wk 1 2013 to Wk 38 2013
Canned Fruit
$1,979,809,747
$3,431,256,971
Fresh Fruit
$294,627,014
$501,706,538
Frozen Fruit Products
All Others
Grand Tot
Select Filter Method
None
Member List
User List
Named Set
Expression
%Fruit%
OK
Cancel

Select Members Window



1	The 'Selected' count in the upper left corner shows how many members are included in the filter. The count adjusts as you change selections in the window. This window is initially populated with all authorized members for the active level. Make selections from the entire list, or execute a search to narrow down the list. Use the search properties to specify the criteria and the parameters by which to search for members to be used in a member list filter or user list. **Note:** The window is also used when selecting members from the expression window for calculated measure items and when administrators set up roles. Click the search icon after you specify your search properties: • Enter a value in the search field. Multiple values can be entered by separating them with a semicolon. If the field is left blank, the available list displays all members for the active level. • Optionally use the Search By drop-down lists. The first list is to select the attribute relationship to perform the search on. The other list lets you choose whether you want your search to contain, not contain, start with, be equal to, not equal to, greater than, or less than the value(s) specified in the search. In the following example, we searched for UPC ABC Classification not equal to "b or c".



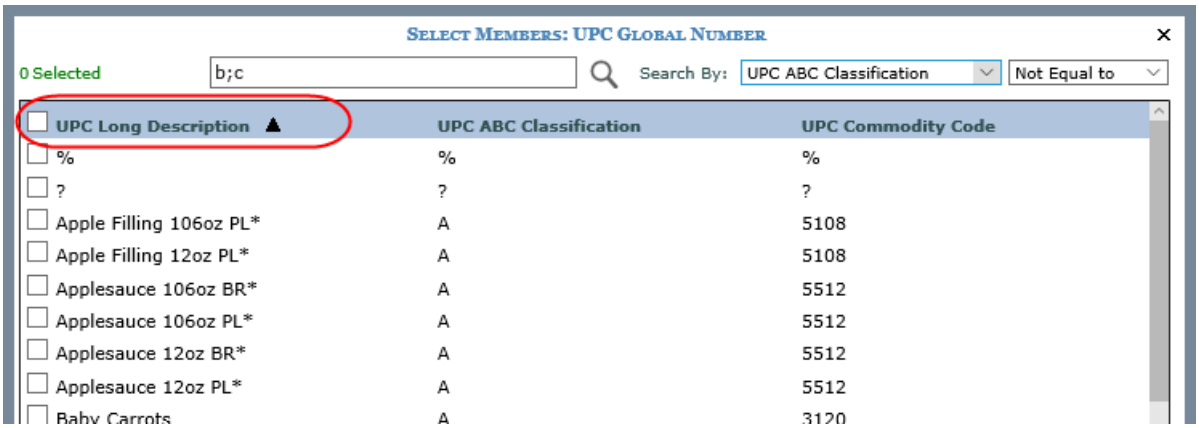
2

Available Selection list – Use this list to select the members to include in a member list filter, expression, etc. Click the checkboxes next to members or click anywhere in member rows to select or deselect members. Click OK when you are done making various selections to apply your filter.

Other options and tips:

- If your search returns only one member, the member will display as selected. At that point, you can click the OK button to close the window and add that member to a filter.
- Selecting members then clicking OK will add the selected members to a filter and close the window.
- Click the checkbox in the heading area to select or deselect all members on all pages in the list at once.
- Use Shift+Click as a shortcut to selecting a range of consecutive members (click the first item, then press Shift key while clicking the last item).

Columns in this area are sort and drag/drop enabled. In the following example, we clicked the UPC Long Description column and dragged it to the first position. We also clicked the Sort icon to perform the sort on that column in ascending order.



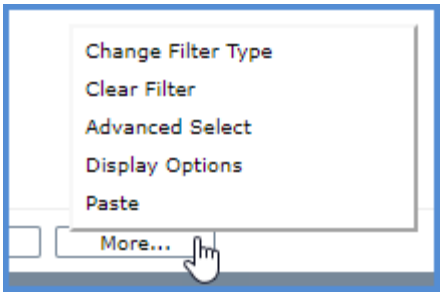
Use the paging arrows and links at the bottom of the list to move between pages of members. Selections made on various pages are retained as you move between pages in the list.

Note: For all windows that display lists (views, user lists, etc.), there is a single administrative setting on the Application window that controls the page size.

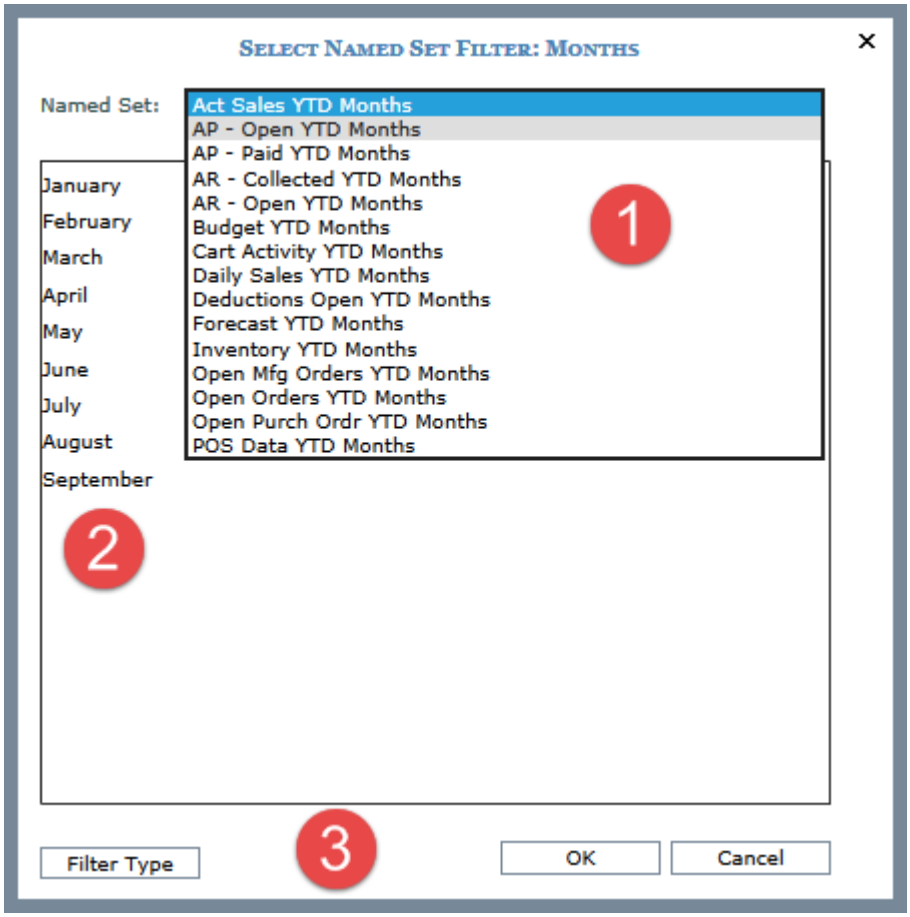
3

Clear All – Click this button to clear all member selections from a filter. The window remains open so you can make new selections.

More… -- Click the More button for additional features:

4	• **Change Filter Type** –Click to access the Select Filter Method window if you need to apply a different type of filter to the level (User List, Named Set, or Expression). • **Clear Filter** – Click as a shortcut to clearing the filter from the level. • **Advanced Select** – Click to access the Advanced Select Members window if you prefer to use that advanced version of the window to search for, select, or clear. The advanced window is helpful when working with levels for which a large amount of members exist. • **Display Options** – Use to change the display columns in this window. You can display up to 10 display columns for a level in the Select Members window. • **Paste** – Click to access the Paste Members window, which lets you copy a list of members into the member list that you are building. Valid values identified in the Paste Members window will get selected in the Select Members window when you are done identifying members for your filter via the Paste Members window. 

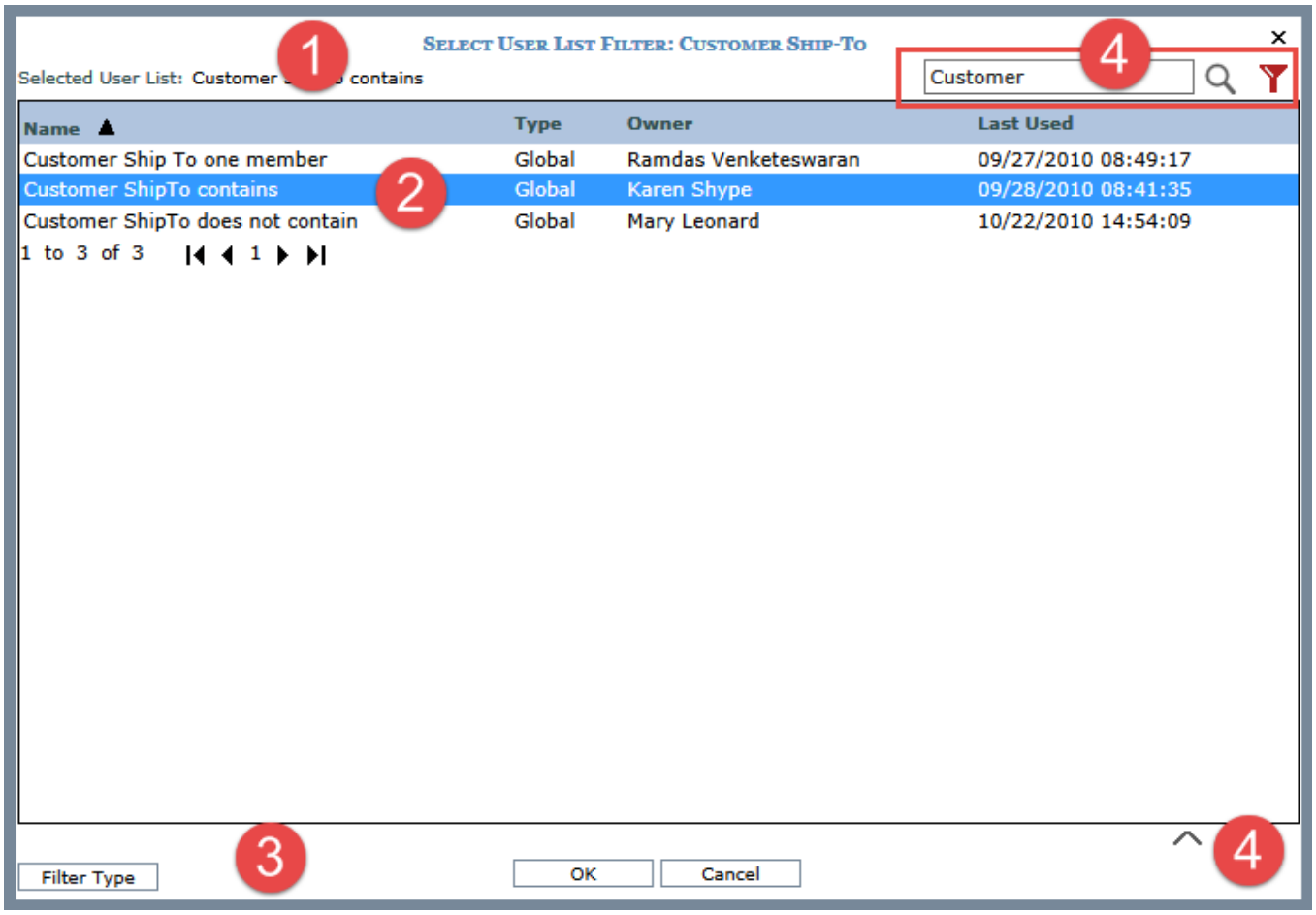
Select Named Set Filter Window



1	**Named Set** – Select a named set from this list to filter a level from a single-level time hierarchy by its YTD periods. Choose a type applicable to the measure items in your view. For example, an Actual Sales named set if there are Actual Sales measure items in the view. **Note:** The list will be disabled and a "No named sets available" message will display in the window for levels that don't have named sets.
2	**Named Set Members** – The time members that make up the named set will display in this section after you select a named set from the above list.
3	**OK** – Click OK to apply the named set selection made in this window and to close the window. **Cancel** – Click Cancel to close the window without applying your selection. **Filter Type** - When you access this window from a view to create a level filter, it will include this button. Click to access the Select Filter Method window if you need to apply a different type of filter to the level (Member List, User List, Expression)

Select User List Filter Window

Main Window Sections

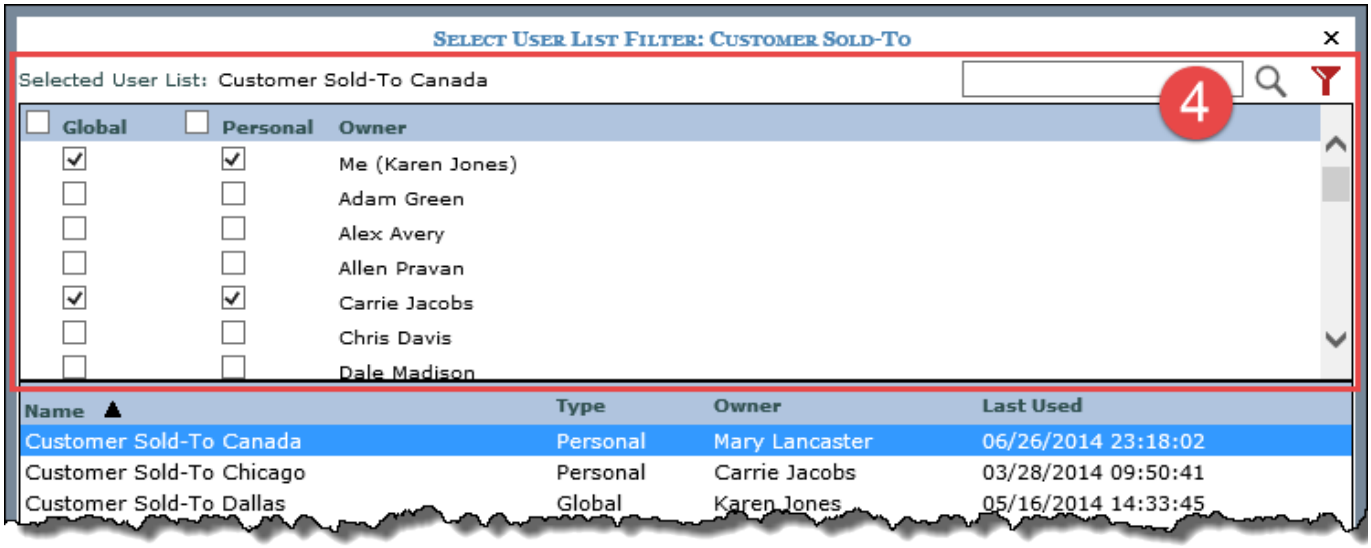


1	**Selected User List** – The name of the actively selected list displays here.

2	**Available User Lists** – Click a list then OK to apply the list as a filter. • This is a list of all user lists that meet search and filter criteria. You can use search to find a user list with a particular name or use the filter tool to look up lists of only certain users (See Search and Filter Features). You can use the Show Details section to look up list properties and members. • To sort the displayed lists, click the Name, Type, Owner, or Last Used column heading. Click a sort icon to change between ascending ▲ and descending ▼ order. To rearrange columns in the section, click a column heading, drag it before or after another column heading, and drop it at the new location. • At the bottom of this section (you may need to scroll down), this is a count of how many lists are displayed in the window. There are paging arrows to move between pages of lists. Arrows are active only when more lists exist than can be displayed in a single page of this section. 1 to 27 of 27 ⏮ ◀ 1 ▶ ⏭
3	**OK** – Click OK to apply the user list selection made in this window and to close the window. **Cancel** – Click Cancel to close the window without applying your selection. **Filter Type** - When you access this window from a view to create a level filter, it will include this button. Click to access the Select Filter Method window if you need to apply a different type of filter to the level (Member List, Named Set, and Expression).
4	See the next two sections for information about the search, filter, and detail lookup tools in this window.

Search and Filter Features

Optionally use the search and/or filter features (section marked '4' in following image) to look for particular user lists.



- **Search** – Enter all or part of the name(s) of the list(s) you are searching for and then click the Search button to execute the search.

- **Filter** – Click the provided button to use the filter feature. It acts as a toggle to show or hide the filter feature. Use the Global and Personal checkboxes to the left of a user's name to indicate whose lists you want to see (users with selected checkboxes will be included in filter results). The checkboxes next to the Global and Personal headings are toggles that select or deselect all Global or Personal lists of all users at one time (for example, if the Personal heading checkbox is selected, all Personal lists of all users will display in the window). At the bottom of the filter section (you may need to scroll down), there is a count of users. There are paging arrows to move between pages of users. Arrows are active only when more users exist than can be displayed in a single page of this section.

Note: The filter toggle will be red if a filter has been applied. If you are using the filter section and then access the details section of the window, the filter section will close automatically.

Show Details Feature

Optionally use this section to view details about the list that is actively selected in the window. Select a list and then click the Show Details button. Click the Hide Details button to hide the section. You can see the members in the list, the list description, count of members in the list, and the list mode (Static or Dynamic).

- Information that displays for list members depends on whether you accessed the window from a view or the Role Maintenance window. If accessed from a view, the section displays attribute relationships available for the level in the view. If accessed from the Role Maintenance window, the section displays attribute relationships as defined by administrative settings in the Dimension window.

Note: Only members your role permits you to access will display. The section will be blank if your role doesn't permit you to access any of the list members.

- To sort detail information, click the heading for any column of information displayed for the members. Click a sort icon to change between ascending ▲ and descending ▼ order. To rearrange columns in the section, click a column heading, drag it before or after another column heading, and drop it at the new location.
- At the bottom of the details section (you may need to scroll down), this is a count of how many members are in the list. There are paging arrows to move between pages of members. Arrows are active only when more members exist than can be displayed in a single page of this section.

Note: If you are using the details section and then access the filter section of the window, the details section will close automatically.

Axis Filter Behavior When Levels are on Opposite Axis

Axis filters tend to be used in views where no levels exist on the axis opposite from the axis filter. That tendency is due to the basic nature of axis filters -- they take into account overall measure item totals for objects (level members) that are on the same axis as the axis filter. Also, the axis filter disregards any filtering impact that levels on the opposite axis have on the measure items and objects. The example that follows shows what to expect from an axis filter in a view with levels on the axis opposite the axis filter.

The following view has levels on rows and columns. Additionally there is a filter on the level in columns that returns one member of the Sales Director level.

View Name: *Axis Filters Example 1*

View Filter

Sales Dir >>	Steve Mentas					
Ship-To Market City	Sales Amount after Returns Q1 to Q3 14	Sales Units after Returns Q1 to Q3 14	ASP Q1 to Q3 14	Sales Amount after Returns Q1 to Q3 13	Sales Units after Returns Q1 to Q3 13	ASP Q1 to Q3 13
Buffalo	$114,641,854	2,234,182	$51	$196,876,407	3,143,917	$62
Calgary	$57,381,046	1,315,652	$44	$98,721,363	1,868,353	$53
Chicago	$76,373,335	1,524,738	$50	$130,499,511	2,101,447	$62
Dallas	$164,838,778	3,258,055	$51	$284,071,921	4,601,809	$61
Phoenix	$54,475,771	1,070,463	$51	$93,574,570	1,513,328	$62
Pittsburgh	$31,274,349	629,490	$50	$51,927,462	847,681	$61
Quebec	$172,659,668	3,290,846	$53	$301,599,661	4,750,837	$63
Raleigh-Durham	$114,740,214	2,182,747	$53	$195,692,040	3,074,005	$63
Seattle	$47,550,283	1,014,939	$47	$81,269,831	1,437,470	$56
St Louis	$39,336,991	800,286	$49	$67,101,515	1,104,388	$60
St. John	$79,861,356	1,629,895	$49	$133,880,862	2,249,995	$59
Winnipeg	$133,698,869	2,611,061	$51	$232,572,343	3,734,308	$62
All Others						
Grand Total	$1,086,832,514	21,562,356	$51	$1,867,787,486	30,427,538	$61

An axis filter is going to be applied to the row axis. The filter is meant to return members from the currently drilled to level, Ship-To Market City, that meet the following conditions:

- Sales Units after Returns Q1 to Q3 14 that are greater than 1,500,000
- ASP Q1 to Q3 14 that are greater than or equal to $50

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Here is the view after the axis filter has been applied. The Ship-To Market Cities that meet the axis filter conditions are Phoenix, Pittsburgh, Seattle, and Winnipeg. Keep in mind that the axis filter disregards the filter effect that the Sales Director member has on the measure items and rows. The axis filter considers the overall measure item totals for members of the Ship-To Market City level. If you were to hide the Sales Director level, you would see why these four cities were returned -- their overall measure item totals meet both of the measure item conditions that were specified in the axis filter (see the second image that follows).

View Name: *Axis Filters Example 1*

View Filter

[Measures].[Data17 (Sales Units after Returns Q1 to Q3 14)]>1500000 AND [Measures].[Data8 (ASP Q1 to Q3 14)]>50

Sales Dir >>	Steve Mentas					
Ship-To Market City	Sales Amount after Returns Q1 to Q3 14	Sales Units after Returns Q1 to Q3 14	ASP Q1 to Q3 14	Sales Amount after Returns Q1 to Q3 13	Sales Units after Returns Q1 to Q3 13	ASP Q1 to Q3 13
Phoenix	$54,475,771	1,070,463	$51	$93,574,570	1,513,328	$62
Pittsburgh	$31,274,349	629,490	$50	$51,927,462	847,681	$61
Seattle	$47,550,283	1,014,939	$47	$81,269,831	1,437,470	$56
Winnipeg	$133,698,869	2,611,061	$51	$232,572,343	3,734,308	$62
All Others	$819,833,241	16,236,402	$51	$1,408,443,280	22,894,751	$61
Grand Total	$1,086,832,514	21,562,356	$51	$1,867,787,486	30,427,538	$61

Here is the view with Sales Director hidden. You can see that Phoenix, Pittsburgh, Seattle, and Winnipeg each have overall more than 1,500,000 sales units after returns for Q1 to Q3 of 2014 and each have overall average selling prices greater than or equal to $50 for Q1 to Q3 of 2014.

View Name: *Axis Filters Example 1*

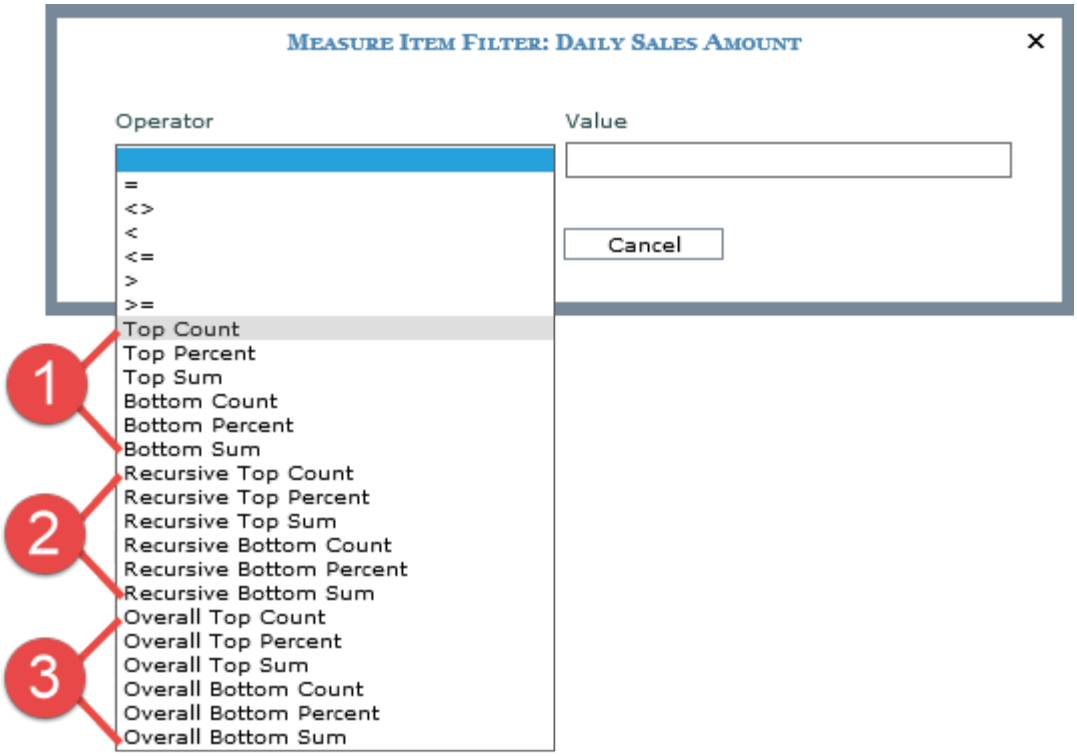
View Filter

Ship-To Market City	Sales Amount after Returns Q1 to Q3 14	Sales Units after Returns Q1 to Q3 14	ASP Q1 to Q3 14	Sales Amount after Returns Q1 to Q3 13	Sales Units after Returns Q1 to Q3 13	ASP Q1 to Q3 13
Phoenix	$213,980,453	4,236,117	$51	$368,792,840	5,962,322	$62
Pittsburgh	$80,319,387	1,566,455	$51	$140,392,735	2,226,122	$63
Seattle	$213,376,352	4,220,801	$51	$360,956,298	5,911,416	$61
Winnipeg	$270,579,255	5,251,312	$52	$465,832,841	7,412,240	$63
All Others	$2,696,027,091	60,247,090	$45	$4,629,177,345	85,234,653	$54
Grand Total	$3,474,282,539	75,521,775	$46	$5,965,152,058	106,746,754	$56

Comparison of Top / Bottom, Recursive, and Overall Filters

Measure item filters in Stratum.Viewer include sets of predefined Stratum filters – Top / Bottom, Recursive Top / Bottom, and Overall Top / Bottom. They can be applied as a Count, Sum, or Percent filter. They are meant to be used in views with multiple levels where you have drilled down through levels by header (which is done by clicking on level names). Examples in the next section illustrate how the different types of filters behave in views.

1. **Top and Bottom** – A filter that is applied only to the most detailed subtotal level displayed in a view. You will see the top or bottom performers at that subtotal level in relation to **every** member that's on display in **every** prior level.
2. **Recursive Top / Bottom** – A filter that is applied to all subtotal levels displayed in a view and that takes into account the top or bottom performing members from all prior levels.
3. **Overall Top / Bottom** – A filter that is applied at the most detailed level displayed in a view to give you the overall top performers based on all the levels displayed.



Predefined Stratum filters are intended to be used in views where multiple levels exist on the axis opposite of measure items. In the following examples, measure items are on columns so the filters will impact levels on rows.

We will drill down on levels by header in the following examples to illustrate the difference between various predefined Stratum filters. Drilling down by header is done by clicking the names of levels in these multi-level views.

Example 1 – "Count" Filters

Here is a view with no filtering applied to its measure items and no other levels drilled to yet.

1 to 14 of 14

View Name: *Top N Count Multiple Levels of Analysis*

View Filter

Ship-To Market	SMkt Long Description	Daily Sales Amounts Wk 1 to Wk 30 2014	Daily Sales Units Wk 1 to Wk 30 2014
100	Chicago	$879,979	35,281
112	Buffalo	$1,088,461	45,023
115	Dallas	$811,920	31,419
123	St Louis	$1,366,502	55,631
153	Phoenix	$607,924	21,315
171	Seattle	$574,384	21,557
172	Raleigh-Durham	$875,126	35,274
185	Philadelphia	$678,110	26,203
187	Pittsburgh	$251,223	9,138
207	Quebec QC	$1,141,740	45,591
229	Calgary AB	$655,085	26,769
249	Winnipeg MB	$853,129	31,875
296	St. John NB	$291,324	11,763
Grand Total		$10,074,906	396,838

The next image shows the view after drilling down by header to the Product Category level. All of the Product Categories for all Ship-To Markets are displayed.

See the next three images for illustrations of how the view results will vary depending on whether a Top, Recursive, or Overall Count filter was applied to the view.

1 to 25 of 90

View Name: *Top N Count Multiple Levels of Analysis*

View Filter

Ship-To Market	SMkt Long Description	Product Category	Daily Sales Amounts Wk 1 to Wk 30 2014	Daily Sales Units Wk 1 to Wk 30 2014
100	Chicago	Fresh Vegetables	$176,459	7,817
		Canned Fruit	$351,386	14,467
		Pork	$57,620	1,901
		Beef	$23,096	1,063
		Fresh Fruit	$136,662	6,612
		Frozen Fruit Products	$6,471	181
		Frozen Prepared Dinners	$128,284	3,240
112	Buffalo	Fresh Vegetables	$140,859	6,023
		Canned Fruit	$601,066	26,153
		Pork	$79,821	2,964
		Beef	$37,514	1,389
		Fresh Fruit	$109,279	5,196
		Frozen Fruit Products	$11,274	334
		Frozen Prepared Dinners	$108,647	2,962
115	Dallas	Fresh Vegetables	$117,708	5,710
		Canned Fruit	$292,976	11,012

Top Count Results

Here's what the view looks like after applying a Top 3 Count filter to Daily Sales Units. Since Top Count filters are applied only to the most detailed subtotal level displayed in a view, only the top 3 Product Categories for **every** Ship-To Market are displayed.

1 to 25 of 40 | 1 to 2 of 2

View Name: *Top N Count Multiple Levels of Analysis*

View Filter

Top Count 3

Ship-To Market	SMkt Long Description	Product Category	Daily Sales Amounts Wk 1 to Wk 30 2014	Daily Sales Units Wk 1 to Wk 30 2014
100	Chicago	Canned Fruit	$351,386	14,467
		Fresh Vegetables	$176,459	7,817
		Fresh Fruit	$136,662	6,612
112	Buffalo	Canned Fruit	$601,066	26,153
		Fresh Vegetables	$140,859	6,023
		Fresh Fruit	$109,279	5,196
115	Dallas	Canned Fruit	$292,976	11,012
		Fresh Vegetables	$117,708	5,710
		Frozen Prepared Dinners	$173,301	4,762
123	St Louis	Canned Fruit	$1,010,252	42,698
		Fresh Vegetables	$128,965	5,711
		Fresh Fruit	$58,664	2,466
153	Phoenix	Canned Fruit	$251,995	8,625
		Fresh Vegetables	$105,296	4,344
		Fresh Fruit	$60,009	3,135
171	Seattle	Canned Fruit	$224,771	7,631
		Fresh Fruit	$93,038	4,630
		Fresh Vegetables	$82,698	3,688
172	Raleigh-Durham	Canned Fruit	$476,031	19,693
		Fresh Fruit	$114,898	5,356
		Fresh Vegetables	$75,352	3,812
185	Philadelphia	Canned Fruit	$416,695	17,542
		Fresh Vegetables	$57,181	2,201
		Fresh Fruit	$49,388	2,095
187	Pittsburgh	Canned Fruit	$77,387	2,281

Recursive Top Count Results

Here's what the view looks like when you change the filter to a Recursive Top 3 Count. Since Recursive Count filters are applied to all subtotal levels displayed in a view, only the top 3 Product Categories from each of the top 3 Ship-To Markets are displayed.

1 to 10 of 10 | 1 to 2 of 2

View Name: *Top N Count Multiple Levels of Analysis*

View Filter

Recursive Top Count 3

Ship-To Market	SMkt Long Description	Product Category	Daily Sales Amounts Wk 1 to Wk 30 2014	Daily Sales Units Wk 1 to Wk 30 2014
123	St Louis	Canned Fruit	$1,010,252	42,698
		Fresh Vegetables	$128,965	5,711
		Fresh Fruit	$58,664	2,466
207	Quebec QC	Canned Fruit	$635,903	25,666
		Fresh Vegetables	$144,927	6,275
		Fresh Fruit	$99,829	5,655
112	Buffalo	Canned Fruit	$601,066	26,153
		Fresh Vegetables	$140,859	6,023
		Fresh Fruit	$109,279	5,196
Grand Total			$2,929,745	125,844

Overall Top Count Results

Here's what the view looks like when you change the filter to an Overall Top 3 Count. Since Overall Top Count filters are applied to only the most detailed level displayed in the view, only the top 3 Ship-to Market/Product Category combinations in terms of overall sales units are displayed.

1 to 4 of 4 | 1 to 2 of 2

View Name: *Top N Count Multiple Levels of Analysis*

View Filter

Overall Top Count 3

Ship-To Market	SMkt Long Description	Product Category	Daily Sales Amounts Wk 1 to Wk 30 2014	Daily Sales Units Wk 1 to Wk 30 2014
123	St Louis	Canned Fruit	$1,010,252	42,698
112	Buffalo	Canned Fruit	$601,066	26,153
207	Quebec QC	Canned Fruit	$635,903	25,666
Grand Total			$2,247,221	94,517

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Example 2 – "Percent" Filters

Here is a view with no filtering applied to its measure items and no other levels drilled to yet.

1 to 23 of 23 | 1 to 6 of 6

View Name: *Top N Percent Multiple Levels of Analysis*

View Filter

Year Based >>	Current Year		Last Year		Grand Total	
Customer Parent	Actual Sales Amount	Actual Sales Units	Actual Sales Amount	Actual Sales Units	Actual Sales Amount	Ac
Wilder Foods	$988,190,296	20,784,963	$1,945,532,956	40,614,753	$2,933,723,251	
Sumpter Distribution	$268,517,849	4,882,917	$542,787,394	9,700,909	$811,305,243	
St Louis Dist Inc	$32,516,509	539,063	$69,144,235	1,098,868	$101,660,744	
Southwest Inc	$44,557,893	723,721	$90,696,698	1,453,994	$135,254,591	
Smith Inc	$31,539,124	533,642	$63,012,323	1,054,314	$94,551,446	
Quebec Foods	$38,144,729	587,609	$73,453,037	1,131,060	$111,597,766	
Prestwick Inc	$64,239,197	1,112,737	$132,850,579	2,253,739	$197,089,776	
Penn Brands	$76,477,776	1,219,030	$153,320,082	2,407,532	$229,797,858	
Packingham Corp	$33,005,636	535,474	$65,864,346	1,042,991	$98,869,981	
Pacific Corp	$28,873,974	464,822	$55,495,871	889,367	$84,369,845	
Oliveri	$113,868,098	2,128,039	$229,817,815	4,222,725	$343,685,913	
NY Foods	$34,081,846	543,282	$65,224,607	1,042,132	$99,306,453	
Montelissi	$25,772,379	427,196	$51,695,819	830,525	$77,468,197	
Midwest Providers	$62,545,804	1,022,632	$122,908,486	1,976,354	$185,454,290	
Maple Tree	$28,714,464	476,372	$56,066,296	900,162	$84,780,760	
Harrington's	$432,533,742	6,738,617	$849,596,667	13,102,262	$1,282,130,409	
Good Foods, Inc.	$356,819,117	5,337,602	$709,963,424	10,585,136	$1,066,782,542	
Dallas Food Service	$31,312,694	518,351	$62,533,410	1,026,362	$93,846,104	
Chicagos Finest	$42,011,896	657,269	$83,871,702	1,285,344	$125,883,598	
Canadian Imports Inc	$34,835,640	569,798	$67,498,896	1,095,843	$102,334,536	
Auburn Providers	$26,644,294	435,214	$54,442,984	882,992	$81,087,278	
Alberta Foods	$31,714,545	515,296	$63,950,442	1,029,967	$95,664,988	
Grand Total	$2,826,917,501	50,753,647	$5,609,728,068	99,627,330	$8,436,645,569	

The next image shows the view after drilling down by header to the Product Category level. All of the Product Categories for all Customer Parents are displayed.

See the next three images for illustrations of how the view results will vary depending on whether a Bottom, Recursive, or Overall Percent filter was applied to the view.

1 to 25 of 155 | 1 to 6 of 6

View Name: *Top N Percent Multiple Levels of Analysis*

View Filter

	Year Based >>	Current Year		Last Year		Grand Total	
Customer Parent	Product Category	Actual Sales Amount	Actual Sales Units	Actual Sales Amount	Actual Sales Units	Actual Sales Amount	Act
Wilder Foods	Fresh Vegetables	$43,360,536	858,095	$88,116,887	1,720,820	$131,477,422	
	Canned Fruit	$837,969,453	18,294,844	$1,637,856,034	35,613,655	$2,475,825,487	
	Pork	$18,353,016	270,925	$37,585,226	546,034	$55,938,242	
	Beef	$14,294,909	223,181	$30,083,825	470,176	$44,378,734	
	Fresh Fruit	$30,549,965	615,023	$61,542,687	1,227,553	$92,092,652	
	Frozen Fruit Products	$11,211,182	167,515	$20,174,836	295,269	$31,386,018	
	Frozen Prepared Dinners	$32,451,236	355,379	$70,173,460	741,247	$102,624,696	
Sumpter Distribution	Fresh Vegetables	$49,470,236	980,596	$100,845,734	1,966,132	$150,315,969	
	Canned Fruit	$94,441,475	1,997,978	$183,758,138	3,880,872	$278,199,613	
	Pork	$16,651,792	246,089	$33,591,090	485,748	$50,242,882	
	Beef	$19,662,029	299,999	$39,082,548	612,294	$58,744,576	
	Fresh Fruit	$39,025,185	772,591	$77,686,820	1,520,121	$116,712,005	
	Frozen Fruit Products	$13,930,898	203,919	$28,866,570	417,264	$42,797,468	
	Frozen Prepared Dinners	$35,336,235	381,743	$78,956,494	818,477	$114,292,730	
St Louis Dist Inc	Fresh Vegetables	$6,291,713	135,100	$13,264,067	281,084	$19,555,780	
	Canned Fruit	$7,920,866	113,929	$14,965,889	215,057	$22,886,755	
	Pork	$2,410,875	35,698	$4,947,371	72,095	$7,358,246	
	Beef	$3,456,106	54,712	$6,186,792	95,583	$9,642,897	
	Fresh Fruit	$5,223,177	112,287	$10,541,104	219,420	$15,764,281	
	Frozen Fruit Products	$2,635,239	38,886	$5,085,008	74,818	$7,720,247	
	Frozen Prepared Dinners	$4,578,534	48,450	$14,154,004	140,811	$18,732,538	
Southwest Inc	Fresh Vegetables	$7,236,723	148,119	$14,120,725	280,834	$21,357,448	
	Canned Fruit	$24,765,482	374,546	$48,622,971	734,442	$73,388,453	

Bottom Percent Results

Here's what the view looks like after applying a Bottom 10 Percent filter to Actual Sales Amount. The bottom 10% of Product Categories for **every** Customer Parent is displayed. The Bottom Percent filter was applied only to the most detailed subtotal level, Product Category.

1 to 25 of 57 | 1 to 6

View Name: *Top N Percent Multiple Levels of Analysis*

View Filter

Bottom Percent 10

Customer Parent	Product Category	Actual Sales Amount	Actual Sales Units	Actual Sales Amount (Last Year)	Actual Sales Units (Last Year)
Wilder Foods	Frozen Fruit Products	$11,211,182	167,515	$20,174,836	295,269
	Beef	$14,294,909	223,181	$30,083,825	470,176
	Pork	$18,353,016	270,925	$37,585,226	546,034
	Fresh Fruit	$30,549,965	615,023	$61,542,687	1,227,553
	Frozen Prepared Dinners	$32,451,236	355,379	$70,173,460	741,247
Sumpter Distribution	Frozen Fruit Products	$13,930,898	203,919	$28,866,570	417,264
	Pork	$16,651,792	246,089	$33,591,090	485,748
St Louis Dist Inc	Pork	$2,410,875	35,698	$4,947,371	72,095
	Frozen Fruit Products	$2,635,239	38,886	$5,085,008	74,818
Southwest Inc	Frozen Fruit Products	$953,501	13,993	$2,281,223	32,925
	Pork	$1,473,736	21,228	$2,787,021	39,550
	Beef	$1,742,478	28,444	$4,396,268	69,043
	Frozen Prepared Dinners	$2,944,235	31,441	$6,645,070	68,310
Smith Inc	Frozen Fruit Products	$467,880	7,063	$1,948,643	27,970
	Pork	$2,326,782	34,706	$5,996,366	87,630
	Beef	$2,850,093	47,229	$5,964,097	99,425
Quebec Foods	Frozen Fruit Products	$1,382,423	20,350	$3,477,189	50,644
	Beef	$2,175,293	33,293	$4,313,989	63,496
	Pork	$3,164,429	45,320	$5,100,858	72,573
Prestwick Inc	Frozen Fruit Products	$3,788,338	57,289	$6,682,377	99,885
	Beef	$4,838,456	77,105	$8,648,467	142,084
Penn Brands	Frozen Fruit Products	$3,839,591	58,530	$7,207,944	109,341
	Beef	$4,919,569	76,379	$9,252,252	142,432
Packingham Corp	Frozen Fruit Products	$1,740,793	24,683	$3,579,342	51,005

Recursive Bottom Percent Results

Here's what the view looks like when you change the filter to a Recursive Bottom 10 Percent. The bottom 10% of Product Categories from each of the bottom 10% of Customer Parents is displayed. The Recursive Bottom Percent filter was applied to each level, Customer Parent and Product Category.

1 to 24 of 24 | 1 to 6 of

View Name: *Top N Percent Multiple Levels of Analysis*

View Filter

Recursive Bottom Percent 10

Customer Parent	Product Category	Actual Sales Amount	Actual Sales Units	Last Year Actual Sales Amount	Last Year Actual Sales Units
St Louis Dist Inc	Pork	$2,410,875	35,698	$4,947,371	72,095
	Frozen Fruit Products	$2,635,239	38,886	$5,085,008	74,818
Smith Inc	Frozen Fruit Products	$467,880	7,063	$1,948,643	27,970
	Pork	$2,326,782	34,706	$5,996,366	87,630
	Beef	$2,850,093	47,229	$5,964,097	99,425
Packingham Corp	Frozen Fruit Products	$1,740,793	24,683	$3,579,342	51,005
	Beef	$1,754,651	26,344	$3,726,302	55,011
Pacific Corp	Frozen Fruit Products	$880,915	13,573	$421,994	6,328
	Pork	$955,101	13,878	$1,717,374	24,935
	Beef	$2,283,039	30,983	$4,765,971	69,182
NY Foods	Pork	$2,395,073	35,297	$4,876,617	70,948
	Frozen Fruit Products	$2,509,613	36,462	$4,656,899	67,895
Montelissi	Frozen Fruit Products	$902,365	14,222	$1,875,821	29,250
	Pork	$1,416,669	21,400	$3,238,271	47,230
	Frozen Prepared Dinners	$2,956,182	33,541	$6,615,240	71,874
Maple Tree	Frozen Fruit Products	$1,889,081	27,738	$4,083,118	59,173
	Canned Fruit	$2,115,213	31,537	$4,052,995	60,376
Dallas Food Service	Frozen Fruit Products	$1,372,583	21,018	$3,228,222	48,795
	Beef	$1,852,935	33,350	$4,293,614	74,783
Auburn Providers	Frozen Fruit Products	$1,450,925	21,018	$3,921,626	56,009
	Pork	$2,189,380	32,014	$4,048,184	59,498
Alberta Foods	Frozen Fruit Products	$1,639,217	24,569	$3,221,392	47,610
	Pork	$2,832,686	42,418	$5,816,543	85,749
Grand Total		$43,827,289	647,628	$92,081,012	1,347,590

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Overall Bottom Percent Results

Here's what the view looks like when you change the filter to an Overall Bottom 10 Percent. Only the bottom 10% of Customer Parent/Product Category combinations in terms of overall sales amount is displayed.

1 to 25 of 85 | 1 to 6

View Name: *Top N Percent Multiple Levels of Analysis*

View Filter

Based | Overall Bottom Percent 10 | Last Year

Customer Parent	Product Category	Actual Sales Amount	Actual Sales Units	Actual Sales Amount	Actual Sales Units
St Louis Dist Inc	Pork	$2,410,875	35,698	$4,947,371	72,095
	Frozen Fruit Products	$2,635,239	38,886	$5,085,008	74,818
	Beef	$3,456,106	54,712	$6,186,792	95,583
	Frozen Prepared Dinners	$4,578,534	48,450	$14,154,004	140,811
	Fresh Fruit	$5,223,177	112,287	$10,541,104	219,420
	Fresh Vegetables	$6,291,713	135,100	$13,264,067	281,084
Southwest Inc	Frozen Fruit Products	$953,501	13,993	$2,281,223	32,925
	Pork	$1,473,736	21,228	$2,787,021	39,550
	Beef	$1,742,478	28,444	$4,396,268	69,043
	Frozen Prepared Dinners	$2,944,235	31,441	$6,645,070	68,310
	Fresh Fruit	$5,441,738	105,949	$11,843,420	228,891
Smith Inc	Frozen Fruit Products	$467,880	7,063	$1,948,643	27,970
	Pork	$2,326,782	34,706	$5,996,366	87,630
	Beef	$2,850,093	47,229	$5,964,097	99,425
	Frozen Prepared Dinners	$4,968,586	53,910	$8,371,959	89,300
	Canned Fruit	$5,646,516	87,146	$10,784,036	166,881
	Fresh Fruit	$6,319,050	130,022	$13,142,999	262,344
Quebec Foods	Frozen Fruit Products	$1,382,423	20,350	$3,477,189	50,644
	Beef	$2,175,293	33,293	$4,313,989	63,496
	Pork	$3,164,429	45,320	$5,100,858	72,573
	Fresh Fruit	$4,385,462	81,533	$9,112,729	171,547
	Fresh Vegetables	$5,795,266	117,843	$12,188,465	235,240
Prestwick Inc	Frozen Fruit Products	$3,788,338	57,289	$6,682,377	99,885
	Beef	$4,838,456	77,105	$8,648,467	142,084

Edit the Information Displayed in the Select and Advanced Select Members Windows

1. In either window, click More then choose Display Options.

2. Make the desired changes in the Display Options window:

   - Select or de-select display columns to change which ones display.
   - Select a value from the Return Members list to change how many members display per page in the search results section of the Advanced Select Members window.

3. Click OK.

Factors Influencing Default Settings in Filtering Windows

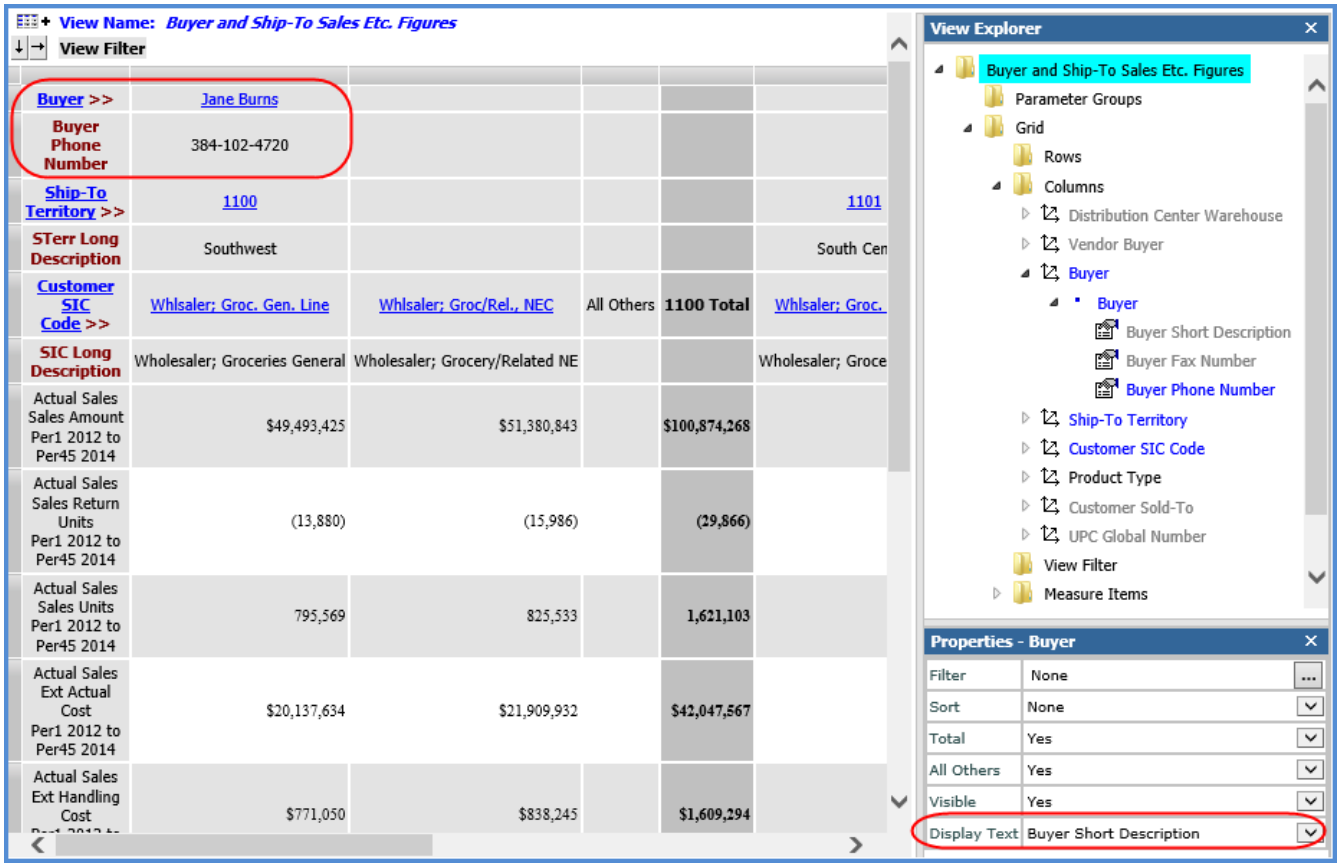
The default state of the following windows depends on how you accessed the window, either from a view or from an administrative page such as Role Maintenance or User List Maintenance.

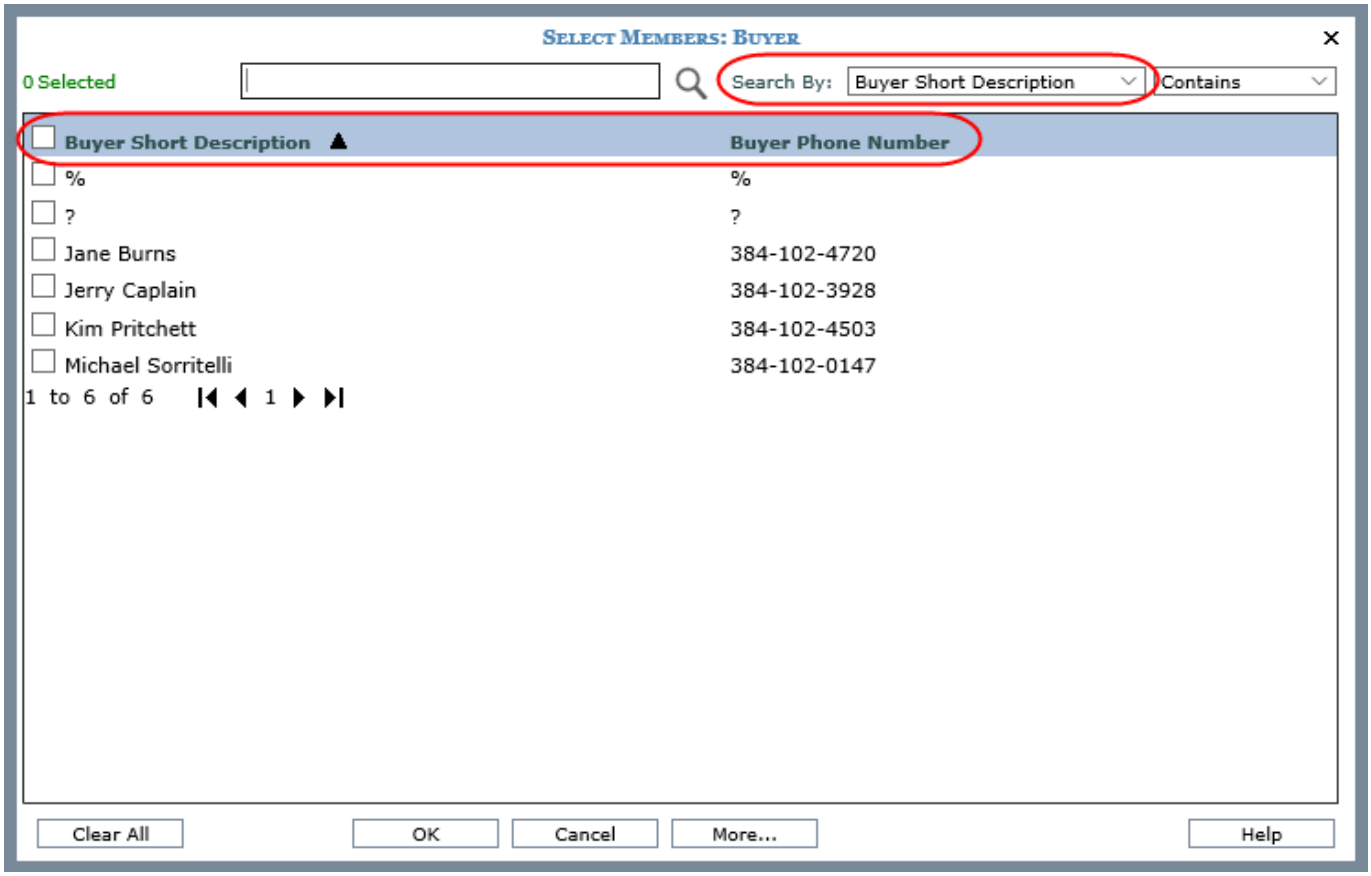
- Select User List Filter window
- Select Members, Advanced Select Members, and Paste Members windows

Windows Accessed from Views or View Prompt Window

When filtering windows are opened from a view, the display columns that display by default are the values and/or attribute relationships showing in the grid. The Search By drop-down lists in the Select and Advanced Select Members windows depend on administrator settings in the Dimension window. If an attribute relationship was selected in those settings for the applicable level, then Search By will default to that attribute relationship. If System Defined was selected in those administrative settings for the level, then searches will default to the level's display text in the view.

The Buyer level in this view has three attribute relationships available for use in the view, and two of them are showing in the view. The Buyer Short Description is the display text, and the Buyer Phone Number also is on display. Those two attribute relationships are the default display columns in the filtering windows. The Buyer Short Description displays first and is the default selection for Search By. This is the default because the administrative Select Members Options settings for that level were set to System Defined and because that attribute relationship is the display text in the view.





When running views with parameters, a Display Text property for parameters can be used to customize what users see when they access filtering windows from the View Prompt window. When the property is set to View, the filtering window behaves the same as described in the prior section. When the property is set to an attribute of the level, the defaults in the filtering windows will use that attribute when windows are accessed from the View Prompt window.

Note: Display Text settings for a parameter only take effect if the Search By setting for a level in the Dimension window are set to System Defined. If an attribute relationship is selected for a level's Search By setting in that window, then Search By will default to that administrator-specified attribute relationship.

The following View includes a Select Members parameter on the UPC Global Number level. The parameter Display Text is set to UPC Long Description. Information displayed in the grid for the level are UPC Commodity Code, ABC Classification, and Short Description. The Search By setting in the Dimension window for the level is set to System Defined. When users access the Select and Advanced Select Members from the View Prompt window to make their UPC selections, the Search By and first display column will default to the UPC Long Description, according to the parameter Display Text setting.

View Name: *UPC Daily Sales by Ship-To Region*

View Filter

		Ship-To Region >>	E. US		S. US		MidW US
		SRgn Country	USA		USA		USA
UPC Global Number	UPC ABC Classification	UPC Short Description	Daily Sales Amount Jan 14 to Sep 14	Daily Sales Units Jan 14 to Sep 14	Daily Sales Amount Jan 14 to Sep 14	Daily Sales Units Jan 14 to Sep 14	Daily Sale Amount Jan 14 to S 14
0 - 39484 - 92837 - 1	B	Apples Red Delicious	$9,574,364	6,905	$13,700,369	10,271	$10,848,
0 - 24000 - 12430 - 4	A	Applesauce 106oz BR*	$6,421,048	1,546	$5,651,066	2,346	$6,560,
0 - 24000 - 12431 - 4	A	Applesauce 106oz PL*	$13,563,955	1,797	$19,136,315	5,825	$17,732,
0 - 24000 - 12530 - 4	A	Applesauce 12oz BR*	$6,062,108	1,478	$3,188,540	676	$7,927,
0 - 24000 - 12531 - 4	A	Applesauce 12oz PL*	$18,921,470	8,768	$8,790,517	3,887	$27,569,
0 - 02749 - 25408 - 6	C	Asparagus	$20,400,226	2,871	$19,747,022	5,475	$25,778,
0 - 79453 - 02938 - 9	A	Baby Carrots	$7,456,195	4,426	$7,923,022	2,177	$8,523,
0 - 39484 - 24300 - 1	B	Bananas	$2,613,118	1,674	$3,187,710	1,273	$3,500,
0 - 24000 - 12432 - 4	A	Blackberries 106oz BR*	$2,753,608	311	$2,990,502	395	
0 - 24000 - 12532 - 4	A	Blackberries 12oz BR*	$3,267,656	975	$1,266,028	373	$4,144,
0 - 24000 - 12477 - 4	B	Blueberries 106oz BR*	$1,304,435	126	$1,910,835	288	$1,715,
0 - 24000 - 12577 - 4	B	Blueberries 12oz BR*	$2,089,920	293	$897,349	86	$2,777,
0 - 24000 - 12456 - 4	C	Blueberry Filling 106oz B	$2,330,422	737	$5,375,531	1,896	
0 - 24000 - 12450 - 4	C	Blueberry Filling 106oz P			$548,892	198	

View Explorer

- UPC Daily Sales by Ship-To Region
  - Parameter Groups
    - ShipTo Region Parameters
    - UPC Parameters
      - MemberParameter
  - Grid
    - Rows
    - Columns
    - View Filter
    - Measure Items
    - Presentation
  - Charts

Properties - MemberParameter

Name	MemberParameter
Type	Select Members
Prompt	Choose UPC's to Review
Default Value	
Display Text	UPC Long Description

SELECT MEMBERS: UPC GLOBAL NUMBER

0 Selected

Search By: UPC Long Description | Contains

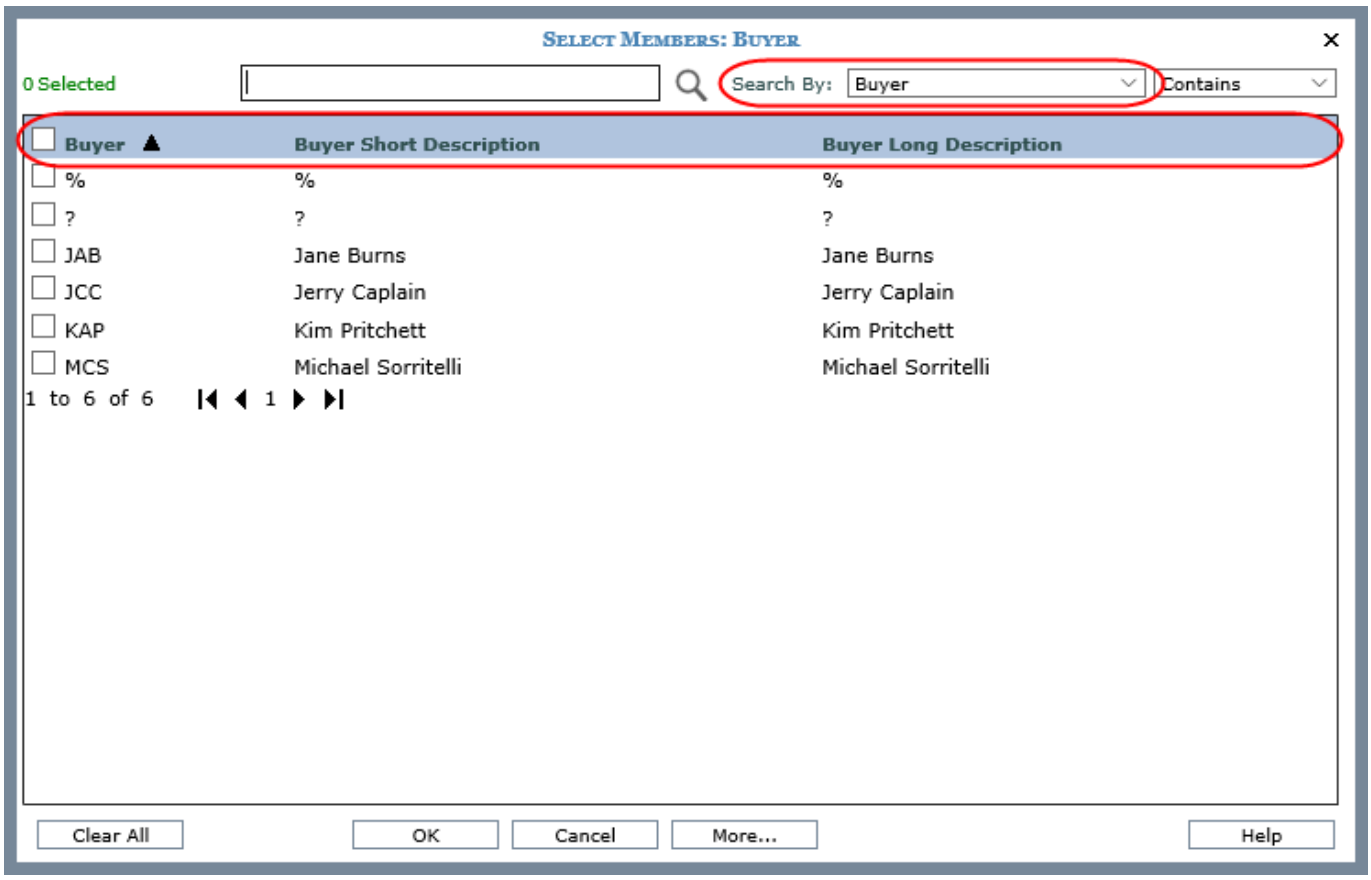
UPC Long Description	UPC ABC Classification	UPC Short Description
%	%	%
?	?	?
Apple Filling 106oz BR*	B	Apple Filling 106oz BR*
Apple Filling 106oz PL*	A	Apple Filling 106oz PL*
Apple Filling 12oz BR*	B	Apple Filling 12oz BR*
Apple Filling 12oz PL*	A	Apple Filling 12oz PL*
Apples Red Delicious	B	Apples Red Delicious
Applesauce 106oz BR*	A	Applesauce 106oz BR*
Applesauce 106oz PL*	A	Applesauce 106oz PL*
Applesauce 12oz BR*	A	Applesauce 12oz BR*
Applesauce 12oz PL*	A	Applesauce 12oz PL*
Asparagus	C	Asparagus
Baby Carrots	A	Baby Carrots
Bananas	B	Bananas
Blackberries 106oz BR*	A	Blackberries 106oz BR*
Blackberries 12oz BR*	A	Blackberries 12oz BR*
Blueberries 106oz BR*	B	Blueberries 106oz BR*

Clear All | OK | Cancel | More... | Help

Windows Accessed from Administrative Pages

The default display columns and Search By are determined by administrator settings when filtering windows are accessed from administrative pages. Administrators use a Dimension window to choose the defaults for each level.

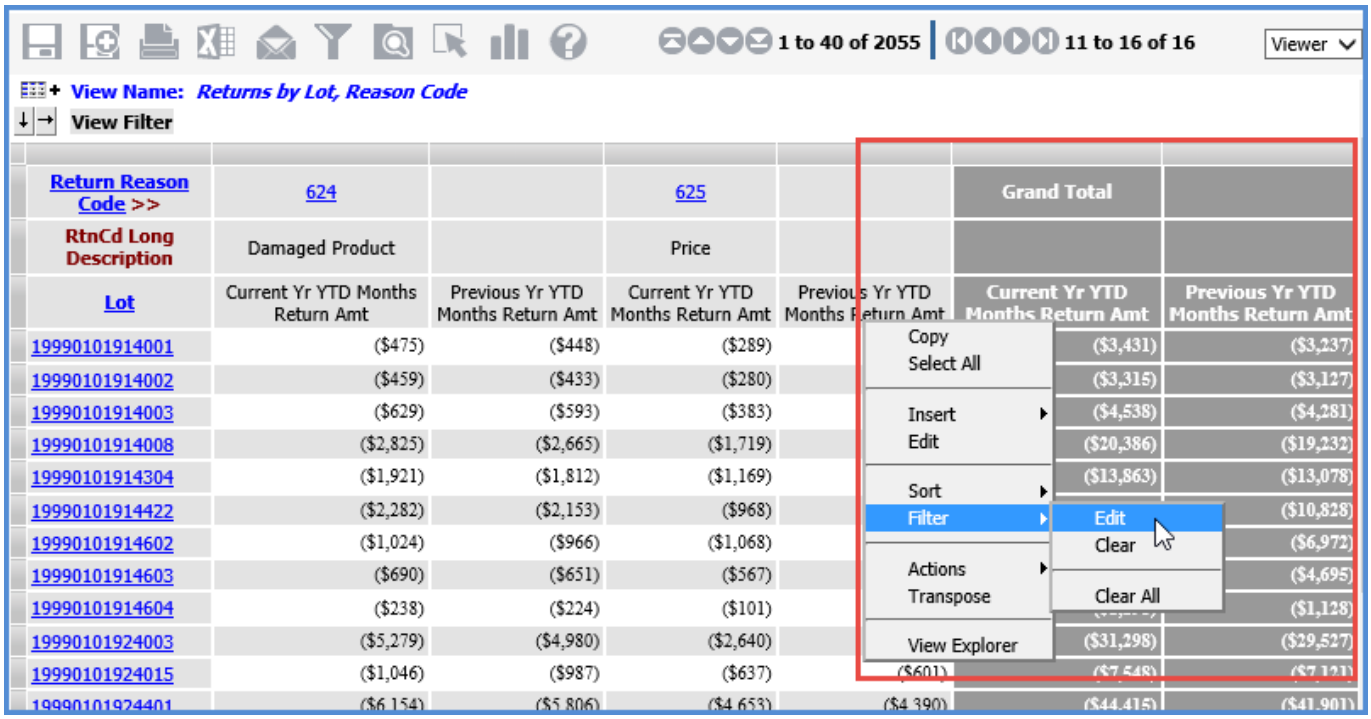
Here is the Select Members window for the Buyer level shown in the first example. The window was accessed from the User List Maintenance window while setting up a user list. Based on administrator settings, the default Search By is value (Buyer) and the default display columns are value, Buyer Short Description, and Buyer Long Description.



Guidelines for Sorting and Filtering on Totals

Here is some helpful information to know when sorting or filtering totals.

- Casual users can edit existing sorts and filters on totals.
- Advanced users and administrators can add new sorts and filters on totals and edit existing sorts and filters.
- This feature is available on the Grand Totals that are on the same axis as the measure items. For example, the measures items in this view are in columns. The Grand Totals in columns can have sorts and filters applied to them.



Identify Values For Filters Using The Paste Members Window

The Paste Members window is a shortcut for identifying a large set of members to use in a member filter. Copy values of level members from an existing Stratum view or another source into the window, validate them, and then accept selections for use in the filter you are setting up. See also "Potential Sources of Data for use with Pasting Members".

1. Copy the members from your secondary source such as an Excel spreadsheet.
2. Back in Stratum, click the Manage All Filters icon in the grid toolbar to access the Filters window.*
3. From the Levels tab in Filters window, click the Change Filter icon next to the level name.
4. The Select or Advanced Select Members window for defining the filter will display.
5. Click the More button and choose Paste.
6. In the Paste Members window that opens, paste the set of values from Step 1 into the left side of the window – its "Paste a list" section.

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7. Click the Validate button to verify the values you pasted here are valid for the level you are working with in this case.

8. Click OK to use all valid values as part of the filter you are setting up.

   - If you accessed the paste functionality from the Select Members window, that window redisplays and valid pasted values will show as selected in the Select Members window.
   - If you accessed the paste functionality from the Advanced Select Members window, that window redisplays and valid pasted values will show in the bottom half of the window along with any other members already selected for the filter.

9. Click OK in the Select or Advanced Select Members window, which takes you back to the Filters window.

10. For the filter you just set up, determine if it will be treated as an Include or Exclude filter. Use the provided drop-down list next to the level's Change Filter icon. Choose "Include" to have the applied filter return only the members specified by your filter selections/criteria. Choose "Exclude" to have the applied filter return all members ***except*** the ones specified by your filter selections/criteria.

11. When you are done in the Filters window, click OK.

***Note:** If you only have one filter to set up, right-click the level in the view and select Filter then Edit. Proceed from there in setting up the filter on that level.

Named Sets

Year to Date (YTD) named sets are created by Stratum.Connector during the processing of the Analysis Services database for your Stratum.Viewer environment. There will be YTD named sets created for each single level, absolute time dimension. The named sets will consist of the time members for a year up to the current period -- for example, days in the year up to the current day, weeks up to the current week, months up to the current month, and quarters up to the current quarter.

This table shows examples of types of Stratum.Viewer dimensions that would and wouldn't have named sets.

Dimension	Hierarchy	Level(s)	Has a Named Set?
Weeks	Weeks	Weeks	Yes. This is an absolute time dimension with a single level.
Year Weeks	Year Weeks	• Year • Weeks	No. This is an absolute time dimension, but it has multiple levels.
Year Based Weeks Based	Year Based Weeks Based	• Year Based • Weeks Based	No. This is a based time dimension.
Product Brand	Product Brand	Product Brand	No. This is not a time dimension.

Named sets can be used in Stratum.Viewer for period based analysis and filtering levels from single level, absolute time dimensions. The named sets also can be used for setting up calculated measure items. More details:

- Named Sets Created for Single Level, Absolute Time Dimensions
- Accessing Named Sets and Using them in Views

Named Sets Created for Single Level Time Dimensions

Here are examples of named sets and their members that are created by Stratum.Connector for single level, absolute time dimensions. Factors that determine the named sets are measure groups and their related Stratum.Server Structure Codes, the Based Periodic ViewSets in ViewGroups associated with the Structure Codes (excluding Based Year ViewSets), Categories in the Structure Codes, and Current Period information in the Stratum.Server database. For each Category in a Structure Code, a Named Set for each type of Based Periodic ViewSet is created.

Structure Code	ViewGroup Associated with Structure Code	Based Periodic ViewSets in the ViewGroup
Sales	Sales	Year Based
		Quarters Based
		Months Based
		Weeks Based
Inventory	Inventory	Year Based
		Quarters Based
		Months Based
		Weeks Based
Forecast	Forecast	Year Based
		Quarters Based
		Months Based

Additionally, the Structure Codes contain these Categories.

Structure Code	Category
Sales	Sales
Inventory	Inventory
Forecast	Forecast

Given this set up, Stratum.Connector will create the following named sets. Their names consist of the Category name, a space, the text "YTD" (for year to date), another space, and the name of the Absolute Periodic ViewSet on which the Based Periodic ViewSet in the ViewGroup was based.

Structure Code	Named Set
Sales	Sales YTD Quarters
	Sales YTD Months

	Sales YTD Weeks
Inventory	Inventory YTD Quarters
	Inventory YTD Months
	Inventory YTD Weeks
Forecast	Forecast YTD Quarters
	Forecast YTD Months

More Information:

Named sets are comprised of members that make up the YTD Periods for the related Absolute Periodic ViewSet. Current Period information determines the member list for each named set. For example, if the current month in the Stratum.Server storage database is defined as April, the YTD Periods for the Months ViewSet would be January, February, March, and April. Given this, named sets such as Sales YTD Months and Forecast YTD Months would be comprised of the members January, February, March, and April.

Given the example named sets shown previously, if the Current Period was September 2014, then:

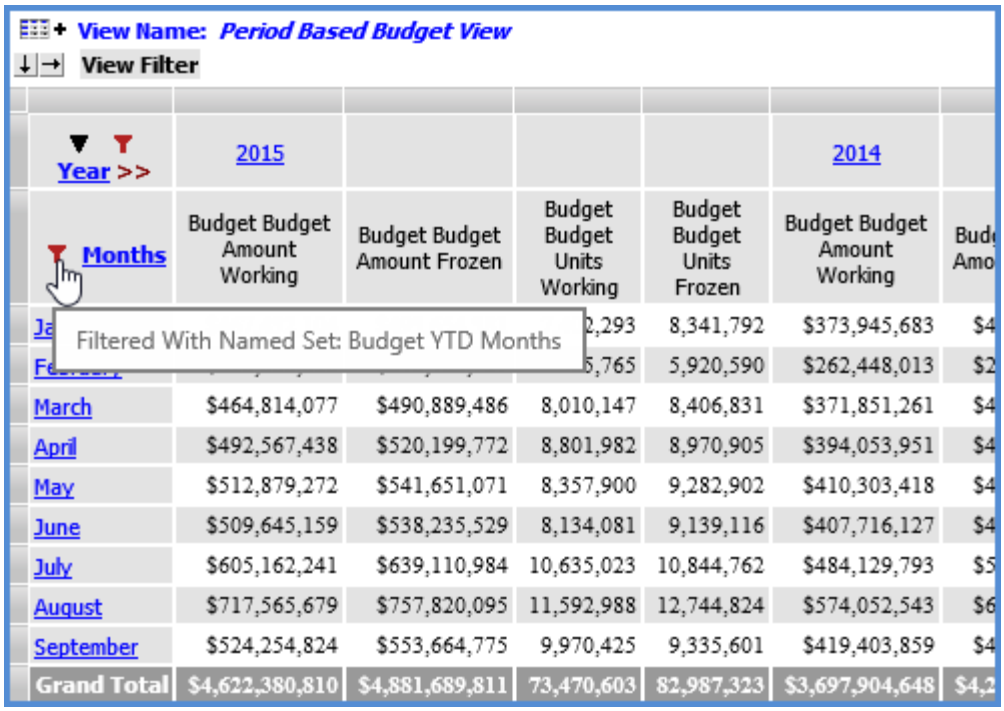
- The list of members for Sales YTD Quarters and other YTD Quarters named sets would be Q1, Q2, and Q3.
- The list of Members for Sales YTD Months and other YTD Months named sets would be January, February, March, April, May, June, July, August, and September.
- The list of Members for Sales YTD Weeks and other YTD Weeks named sets would be Week 1 through Week 38.

Accessing Named Sets and Using Them in Views

Named sets are accessed from the Select Named Set Filter window, which in turn is accessed from the Select Filter Method window when you are working with filters or working with expressions. Examples of using named sets follow. Remember, to use named sets you must be working with a single level, absolute time dimension such as Weeks, Months, Quarters, or Periods. When you are choosing a named set for a filter or expression, be sure that the set is relevant to the measure items in the view or expression. For example, if the measure item in a view is Actual Sales and you are filtering a level by a named set, choose one that pertains to Actual Sales rather than one pertaining to Budget.

Named Set Used for a Filter

The following view includes the Months level, which is from the Months time hierarchy and time dimension. Because the Months dimension is a single level, absolute time dimension, you can use the named sets for the Months level when working with the view. The Budget YTD Months named set was used to filter the level because Budget measure items are in the view. More information follows this image.

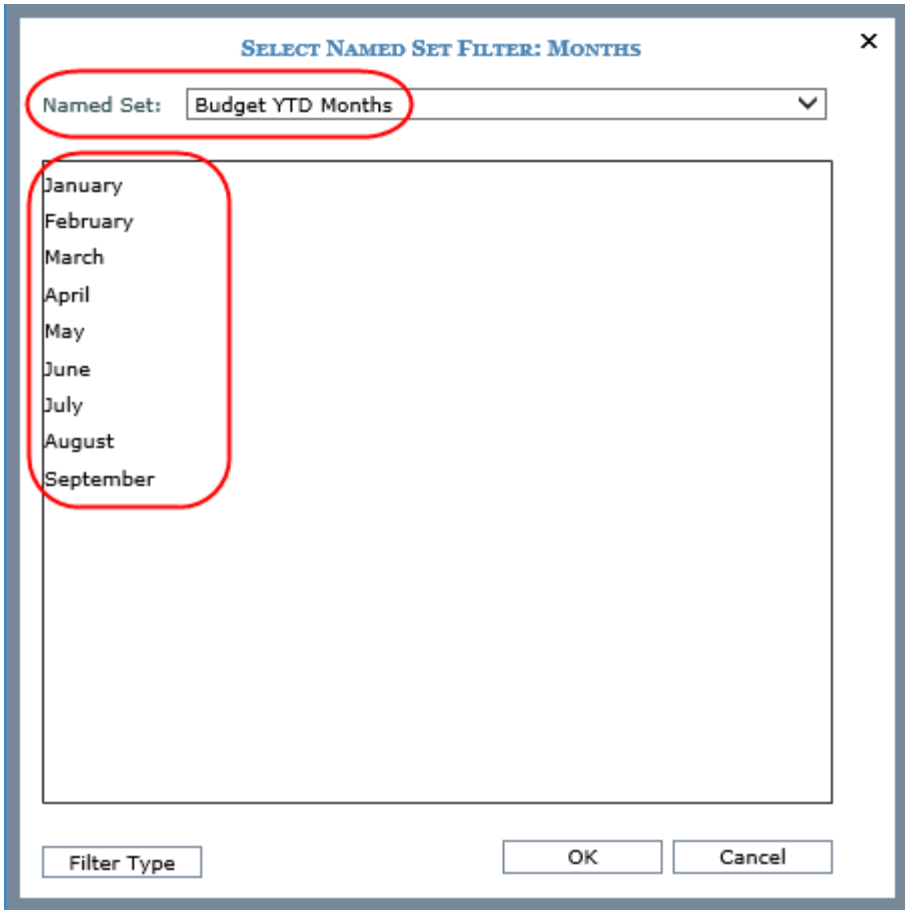


Year >>	2015				2014	
Months	Budget Budget Amount Working	Budget Budget Amount Frozen	Budget Budget Units Working	Budget Budget Units Frozen	Budget Budget Amount Working	Bud Amo
Ja			2,293	8,341,792	$373,945,683	$4
Fe			6,765	5,920,590	$262,448,013	$2
March	$464,814,077	$490,889,486	8,010,147	8,406,831	$371,851,261	$4
April	$492,567,438	$520,199,772	8,801,982	8,970,905	$394,053,951	$4
May	$512,879,272	$541,651,071	8,357,900	9,282,902	$410,303,418	$4
June	$509,645,159	$538,235,529	8,134,081	9,139,116	$407,716,127	$4
July	$605,162,241	$639,110,984	10,635,023	10,844,762	$484,129,793	$5
August	$717,565,679	$757,820,095	11,592,988	12,744,824	$574,052,543	$6
September	$524,254,824	$553,664,775	9,970,425	9,335,601	$419,403,859	$4
Grand Total	$4,622,380,810	$4,881,689,811	73,470,603	82,987,323	$3,697,904,648	$4,2

To set up the filter, the Months level was right-clicked and Filter then Edit was selected from the pop-up menu that displayed. In the Select Members window that displayed by default, the More button was clicked then Change Filter Type was selected to open the Select Filter Method window. In that window, Named Set was selected and OK was clicked.

Note: Another option in the following window would have been to select Named Set, enter the name of the named set in the quick filter field, and click OK. In that case, the filter would be applied without accessing the Select Named Set Filter window.

The Select Named Set Filter window displayed, and the Budget YTD Months named set was selected. The window displayed the members in the named set. Then, OK was clicked to apply the filter.



Named Set Used for a Calculated Measure Item

Here is an example of named sets used for calculated measure items. Both YTD calculated measure items use a named set in their expression. The calculated measure items take into account data from all months up to and including the current month for the last year and current year. More information follows this image.

Note: You can create a similar view using measure items with time ranges. The view would need to be one in which the Time Range property is enabled.

View Name: *RepBroker YTD Sales*

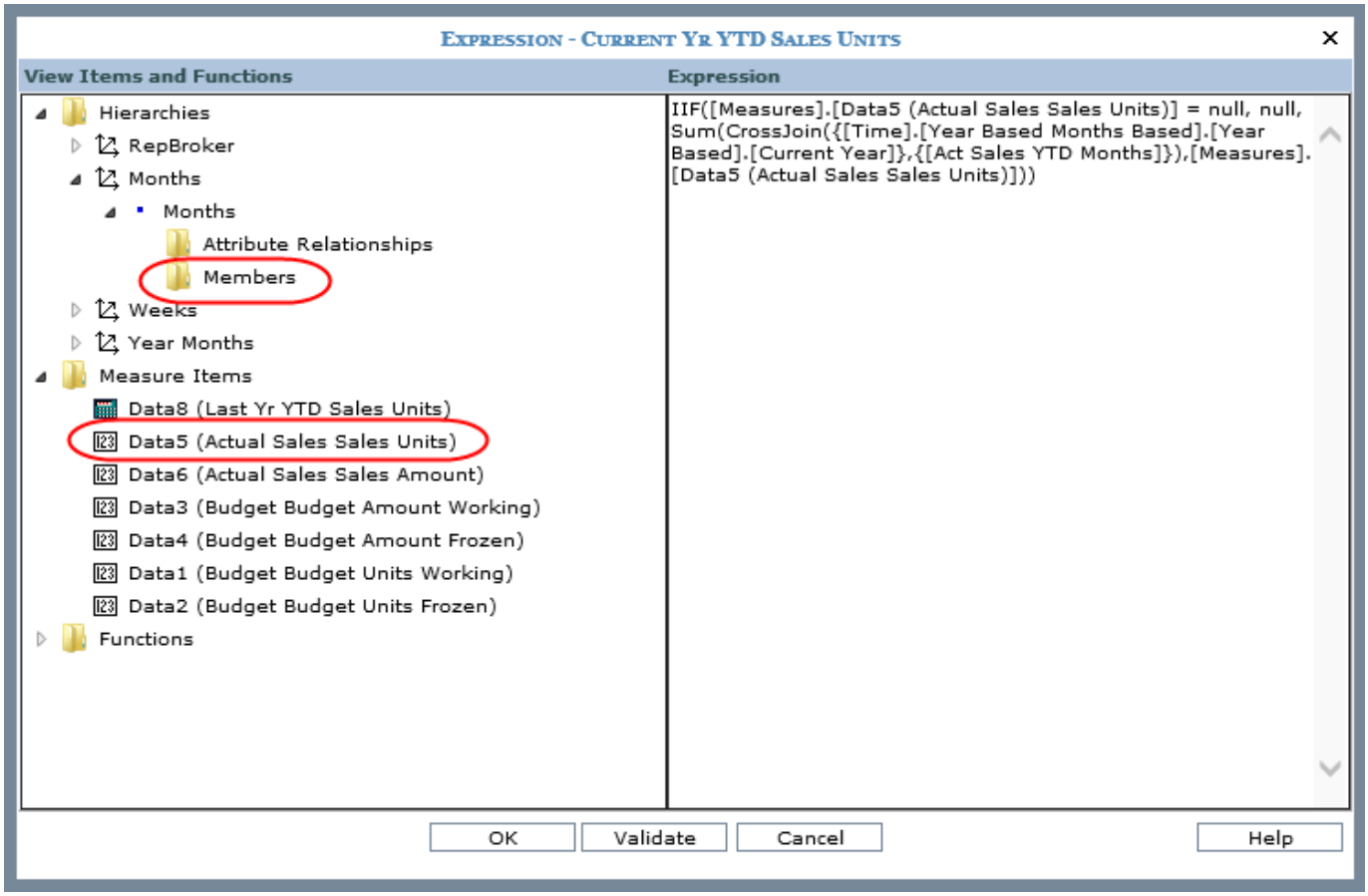
View Filter

RepBroker	Current Yr YTD Sales Units	Last Yr YTD Sales Units
300	31,341,259	44,599,018
301	1,689,678	2,400,232
302	4,692,998	6,578,454
303	1,809,326	2,524,668
304	1,875,791	2,616,356
305	10,180,005	14,202,580
306	2,390,317	3,306,890
307	704,599	981,233
308	1,841,984	2,640,231
309	1,562,082	2,150,511
312	7,375,334	10,427,491
313	8,058,285	11,493,633
315	2,282,187	3,135,602
318	861,157	1,177,376
Grand Total	76,665,003	108,234,275

The expression for the first measure item is:

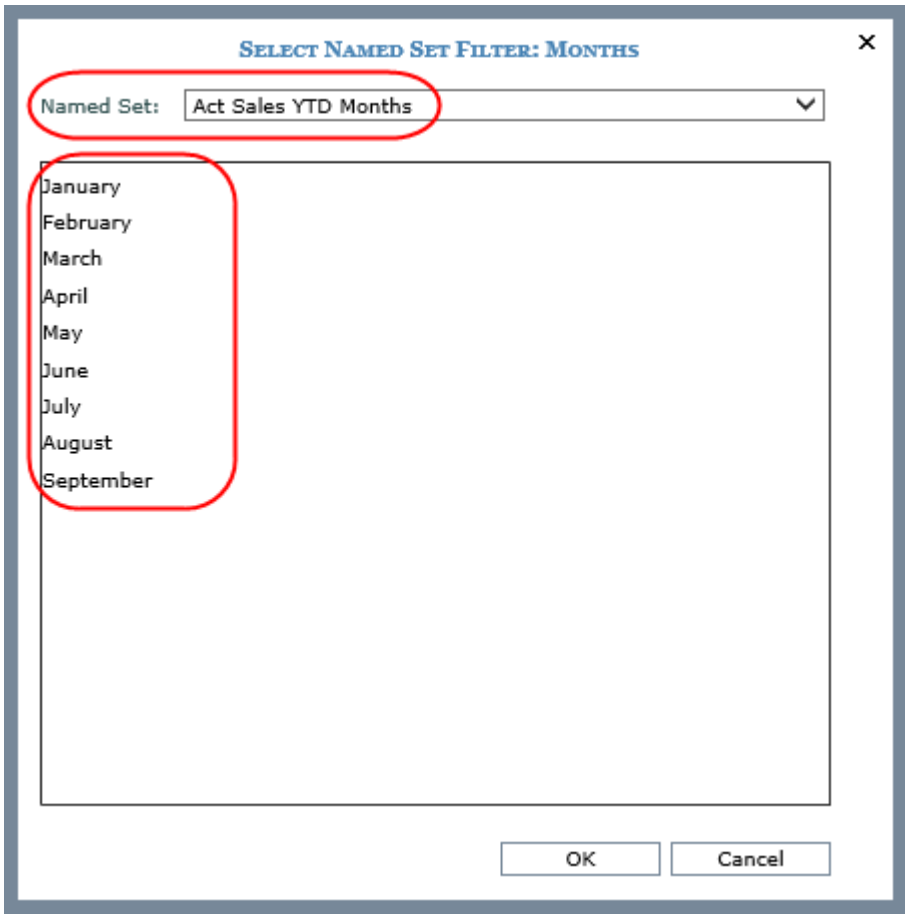
IIF([Measures].[Data5 (Actual Sales Sales Units)] = null, null, Sum(CrossJoin({[Time].[Year Based Months Based].[Year Based].[Current Year]},{[Act Sales YTD Months]}),[Measures].[Data5 (Actual Sales Sales Units)]))

This expression uses the Act Sales YTD Months named set and the Actual Sales Sales Units measure item, which is part of the view definition but hidden from display. The expression has been optimized to check whether or not sales units data exists. The expression will be executed only for cases where there is data. Running the expression without this check could be time consuming.



When building such expressions, you can enter the name of the relevant named set directly into the Expression window. Or, navigate to the appropriate level in the window and click its Members sub-folder to access the Select Filter Method window. For this measure item's expression, the Members sub-folder of the Months level was clicked to access the Select Filter Method window. Named Set was selected, and OK was clicked.

The Act Sales YTD Months named set was selected since the measure item in the expression is Actual Sales Sales Units.



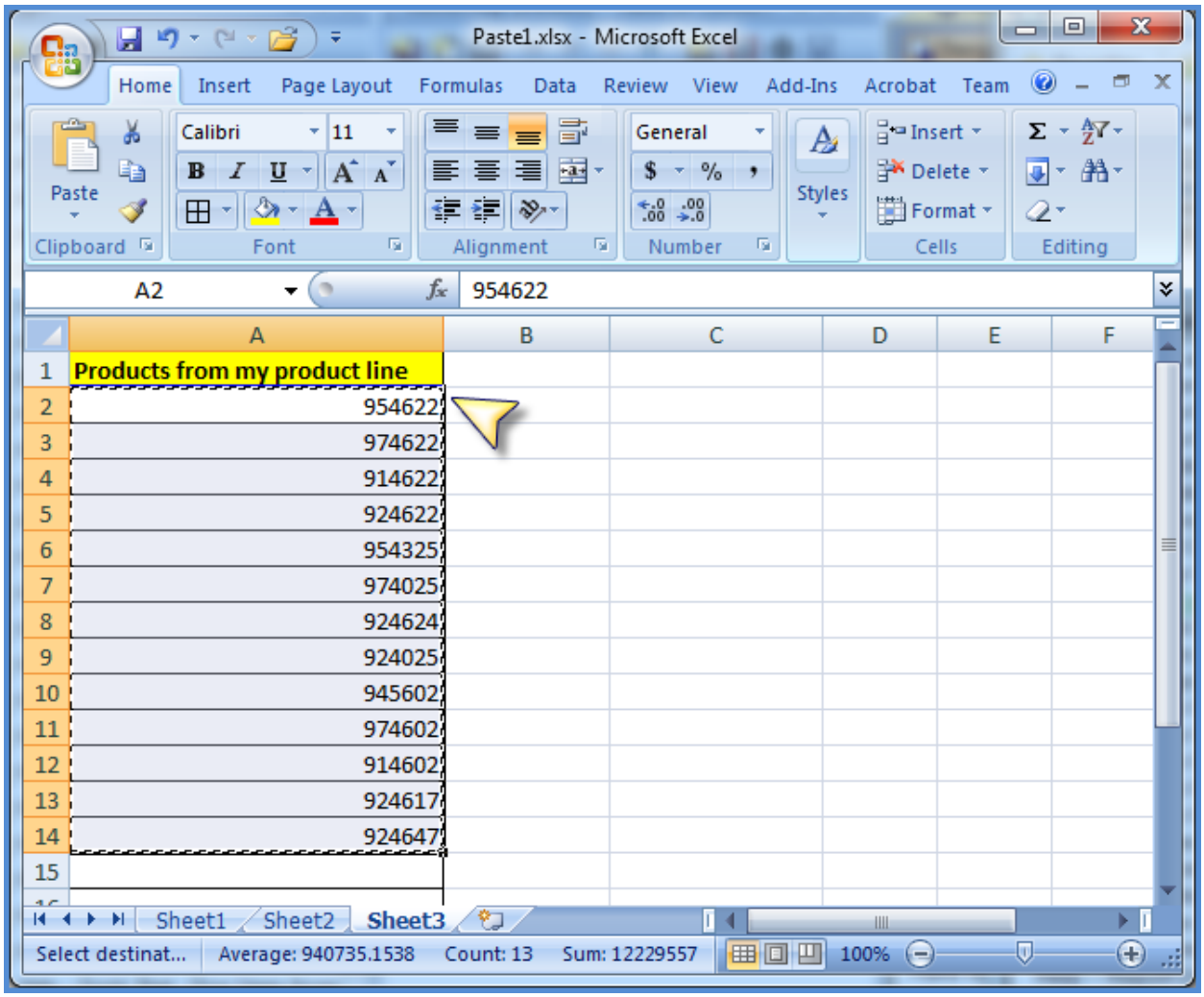
Potential Sources of Data for use with Pasting Members

Paste Members functionality lets you copy a list of members into Stratum.Viewer, validate the list, and then add valid members to the member list filter or user list definition with which you are working. You can copy members from sources such as the ones listed below as well as directly from existing Stratum views:

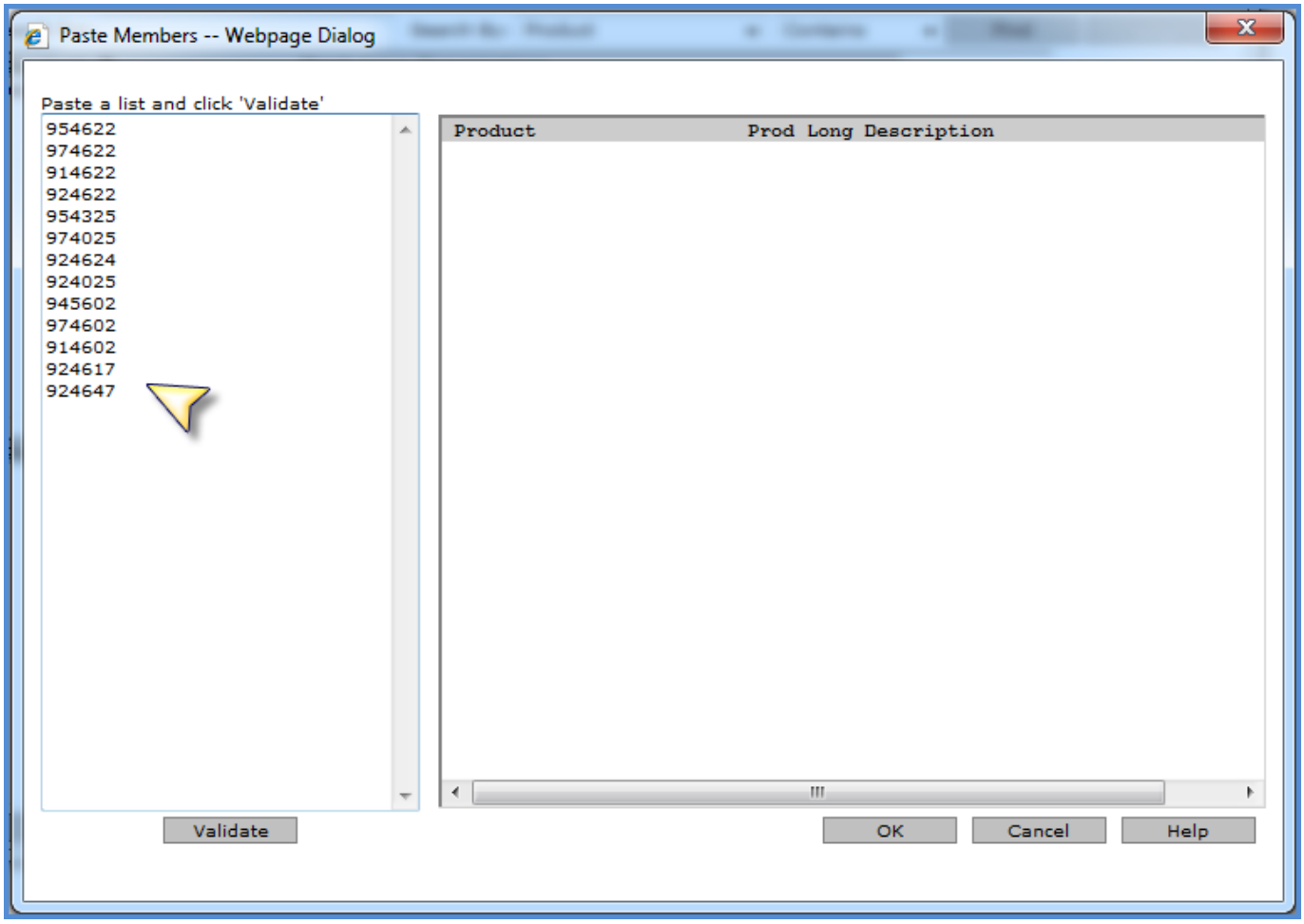
- A column in a Microsoft Excel spreadsheet.
- A list of members separated by paragraph returns in a Microsoft Word document.
- A comma-delimited list of members, such as from an e-mail or text file. You can remove the commas before the paste via Excel as shown in the last example that follows.

Excel Example

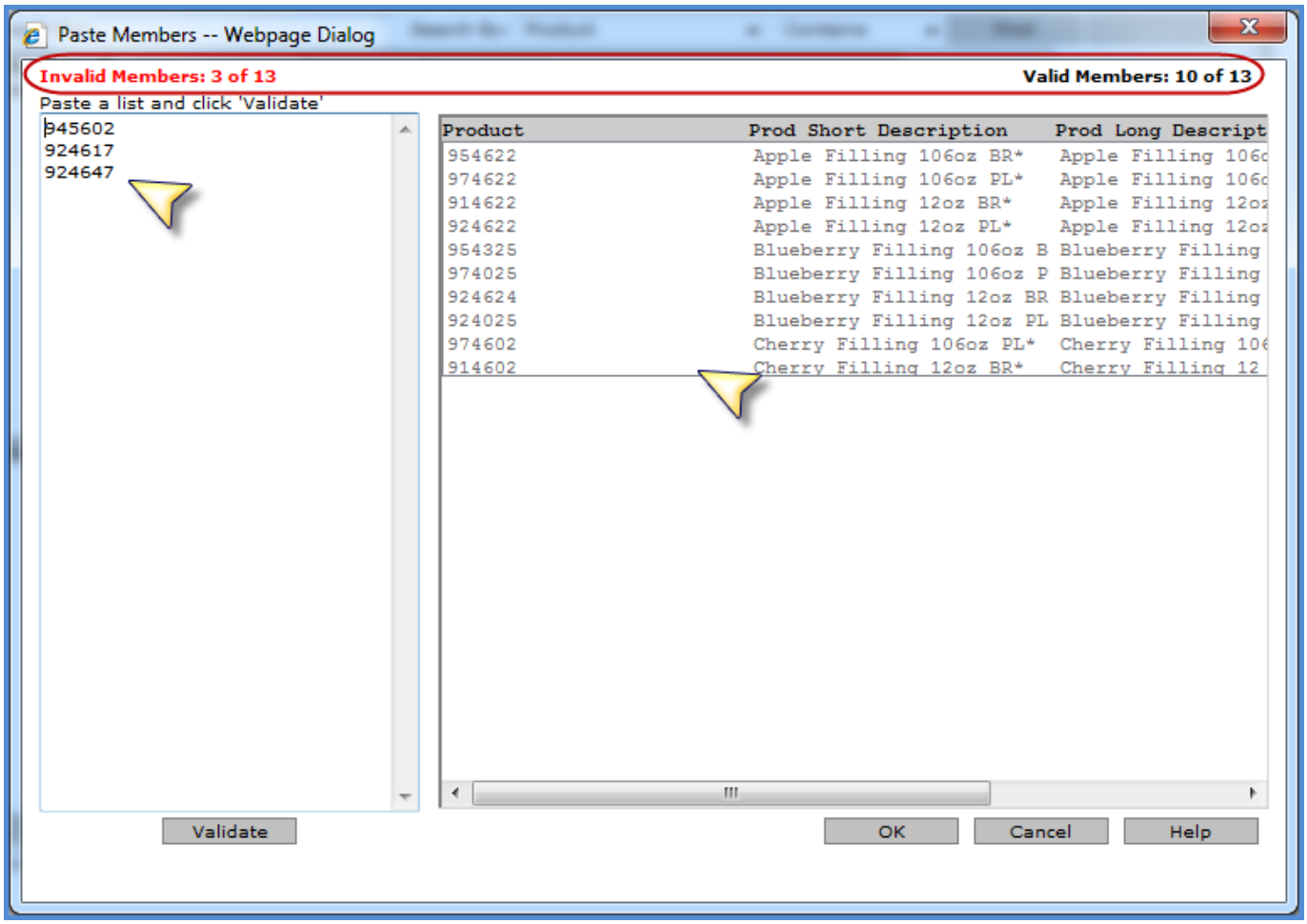
Here is an example of pasting members while working with the Product level. The Advanced Select Members window had been accessed for that level and then Paste was selected from the More menu. Next, this list of values for Product members was copied from an Excel spreadsheet column.



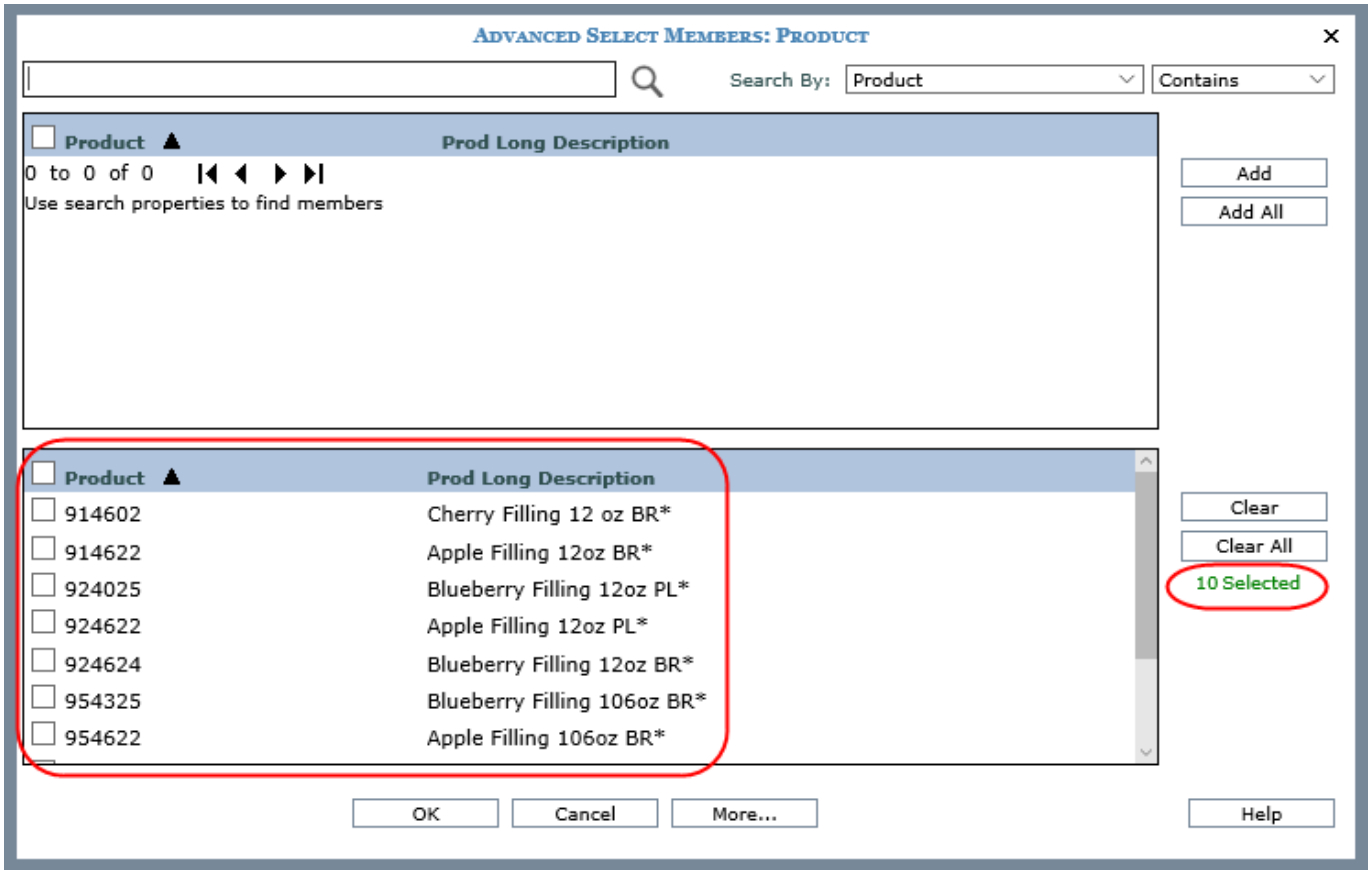
The copied text was pasted into the Paste Members window.



The Validate button was clicked. Valid members were moved to the right side of the window. Invalid members remained in the left side of the window.

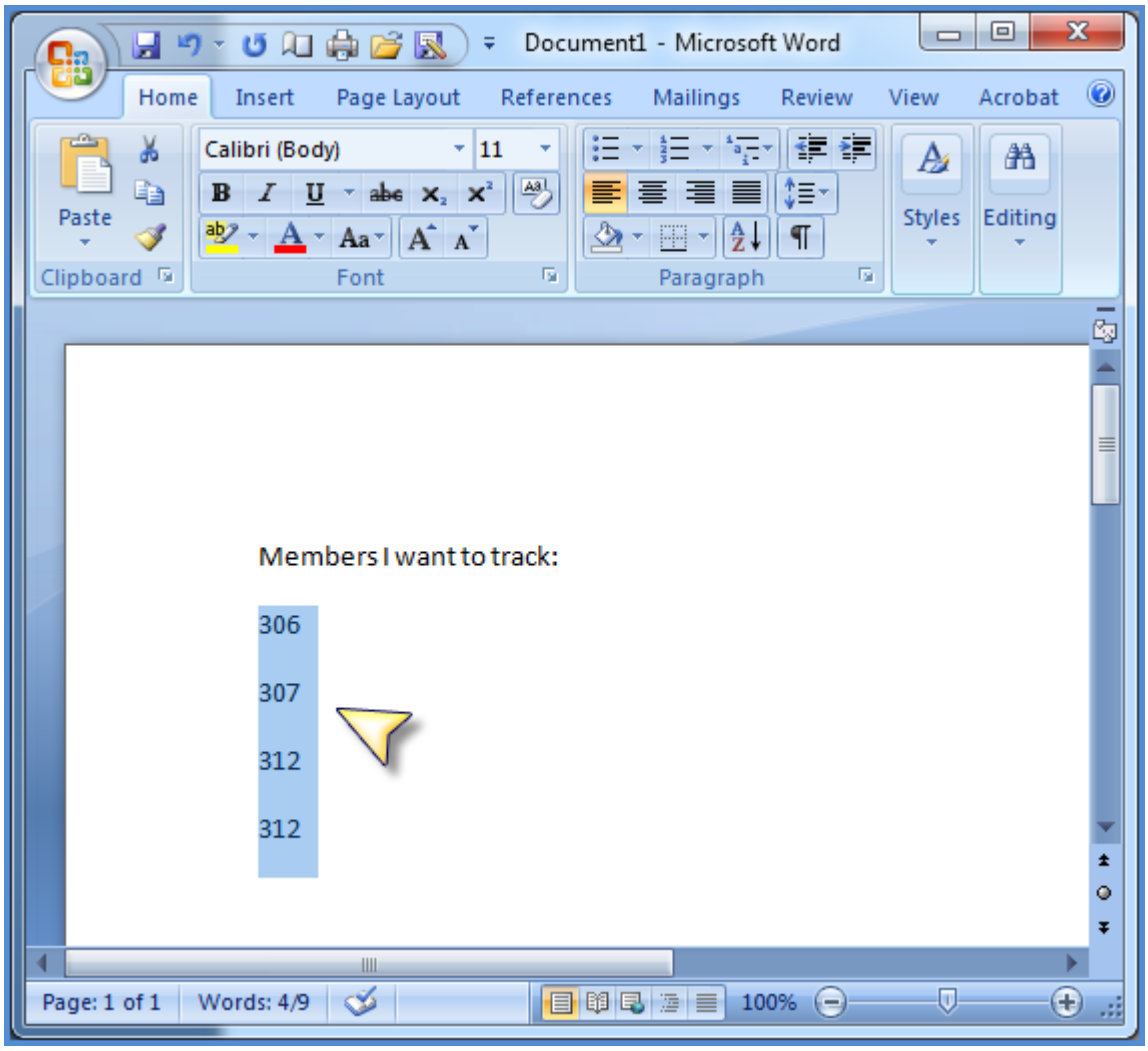


The user could have potentially edited the invalid information to correct it by typing in the left side of the window. Or, the user could have pasted or typed additional new members then performed another validate. Instead, the OK button was clicked to return the valid members to the Advanced Select Members window.

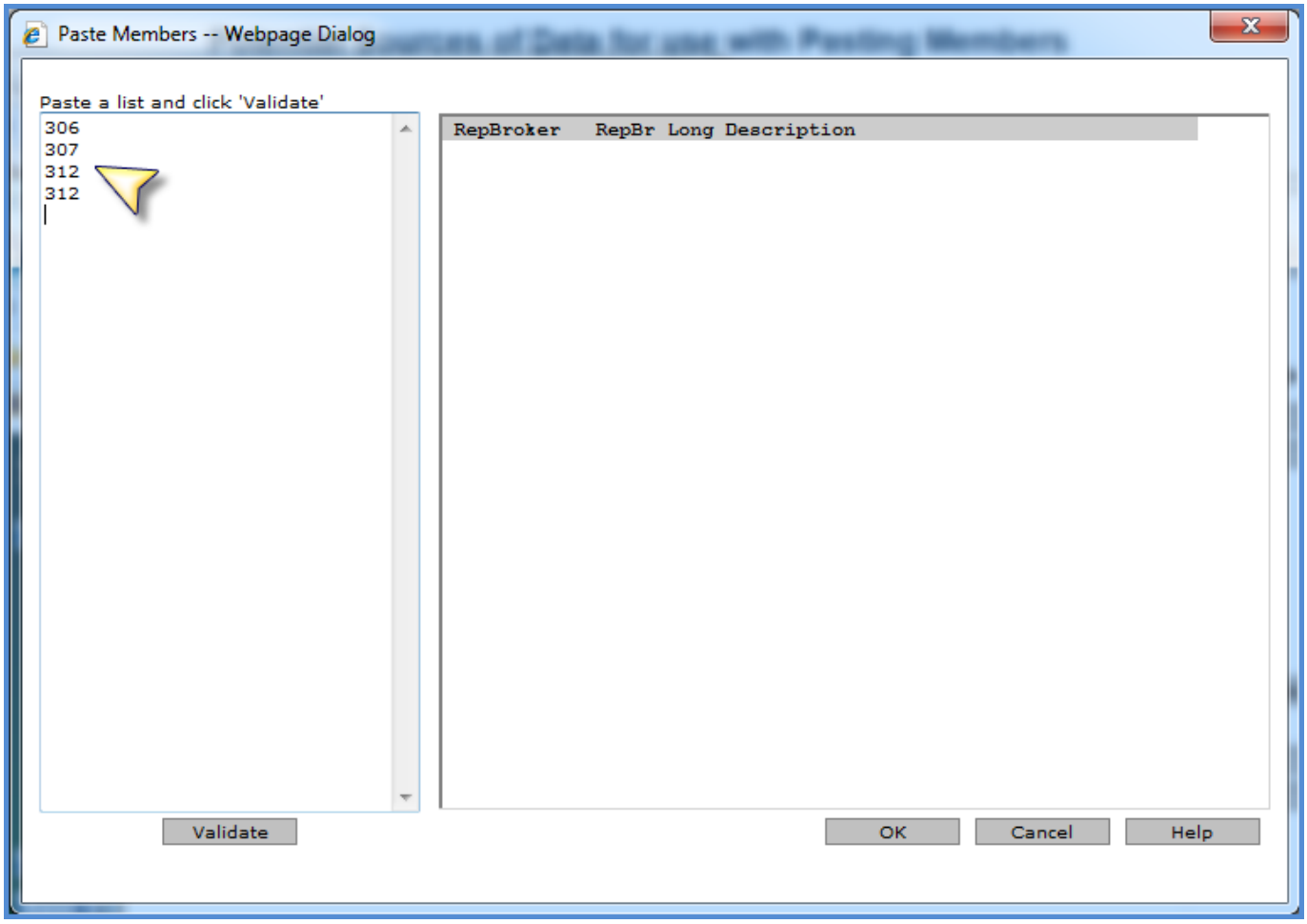


Word Example

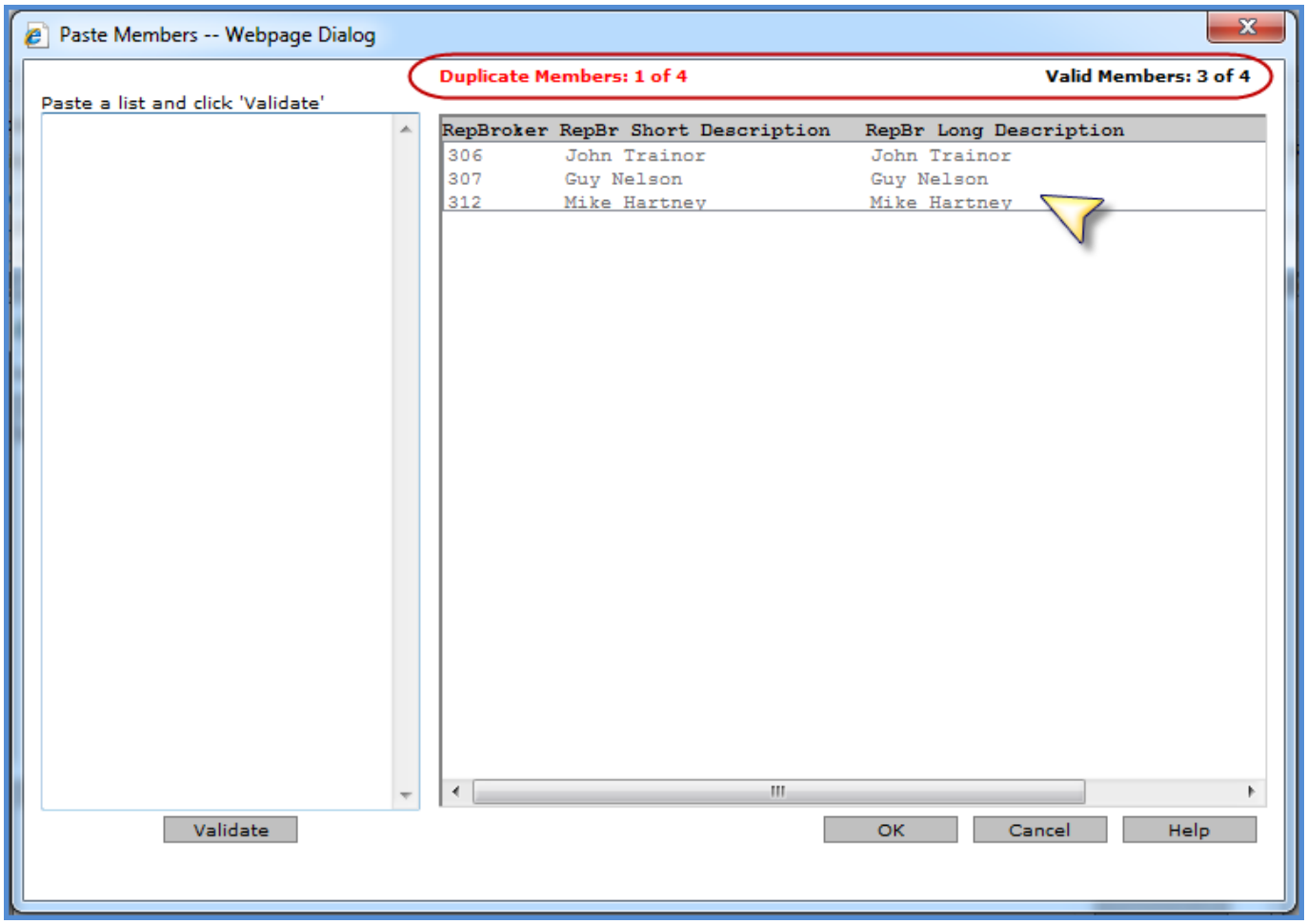
Similar pasting can be done from Word. Here is an example of RepBroker members in a Word document.



The text was copied from Word then pasted into the Paste Members window.

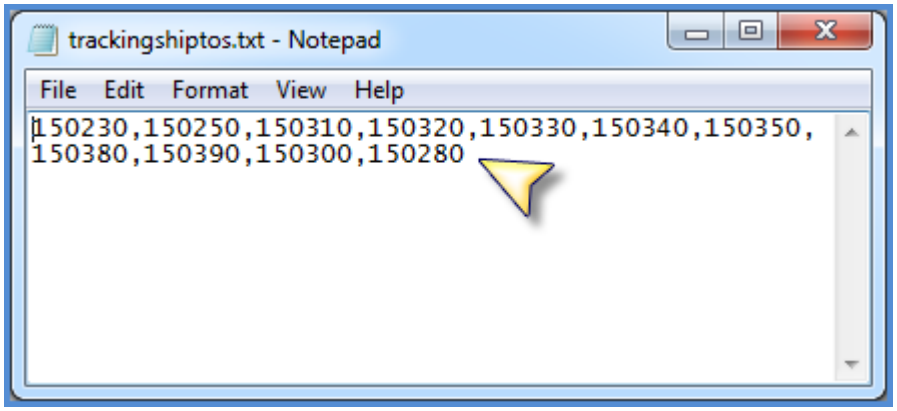


Here is the window after the Validate button was clicked. The member 312 appeared twice in the pasted text, so it was considered a duplicate member and only counted once in the count of valid members.

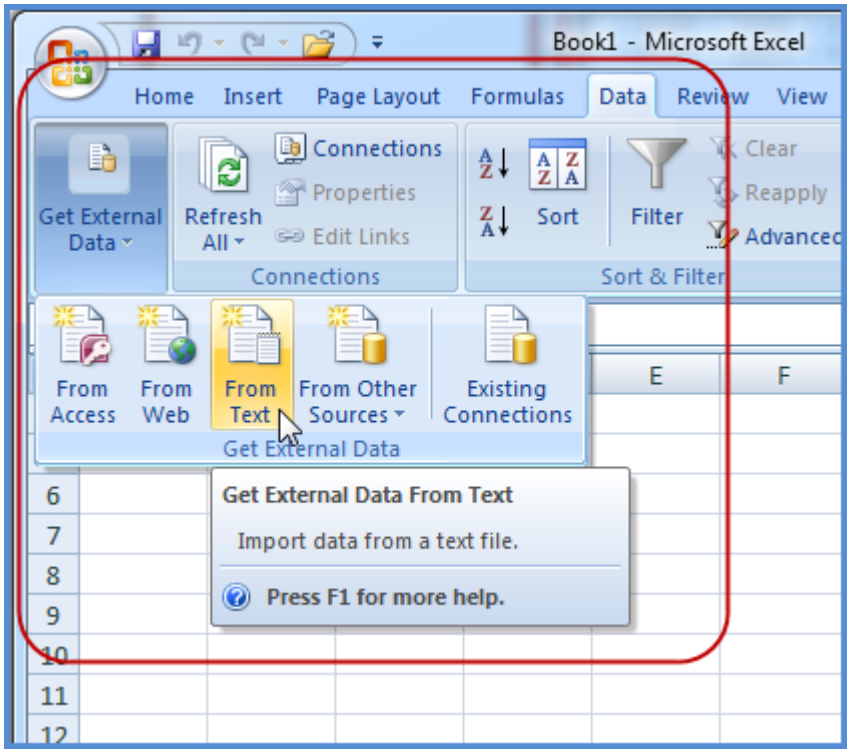


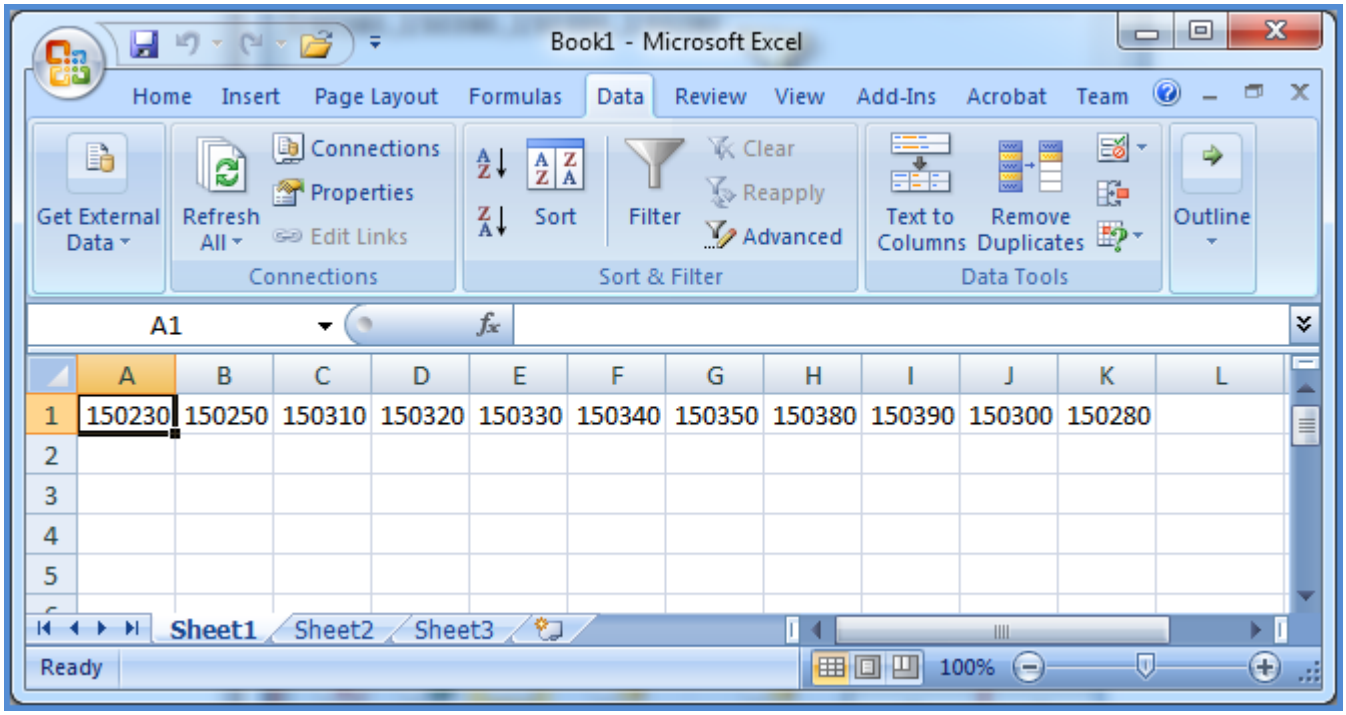
Text File Example

Here is a list of values for Customer Sold-To members in a text file.

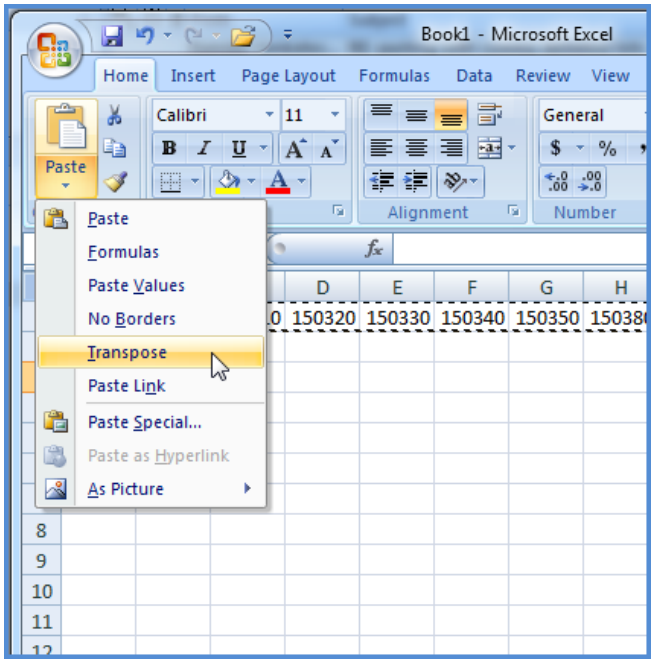


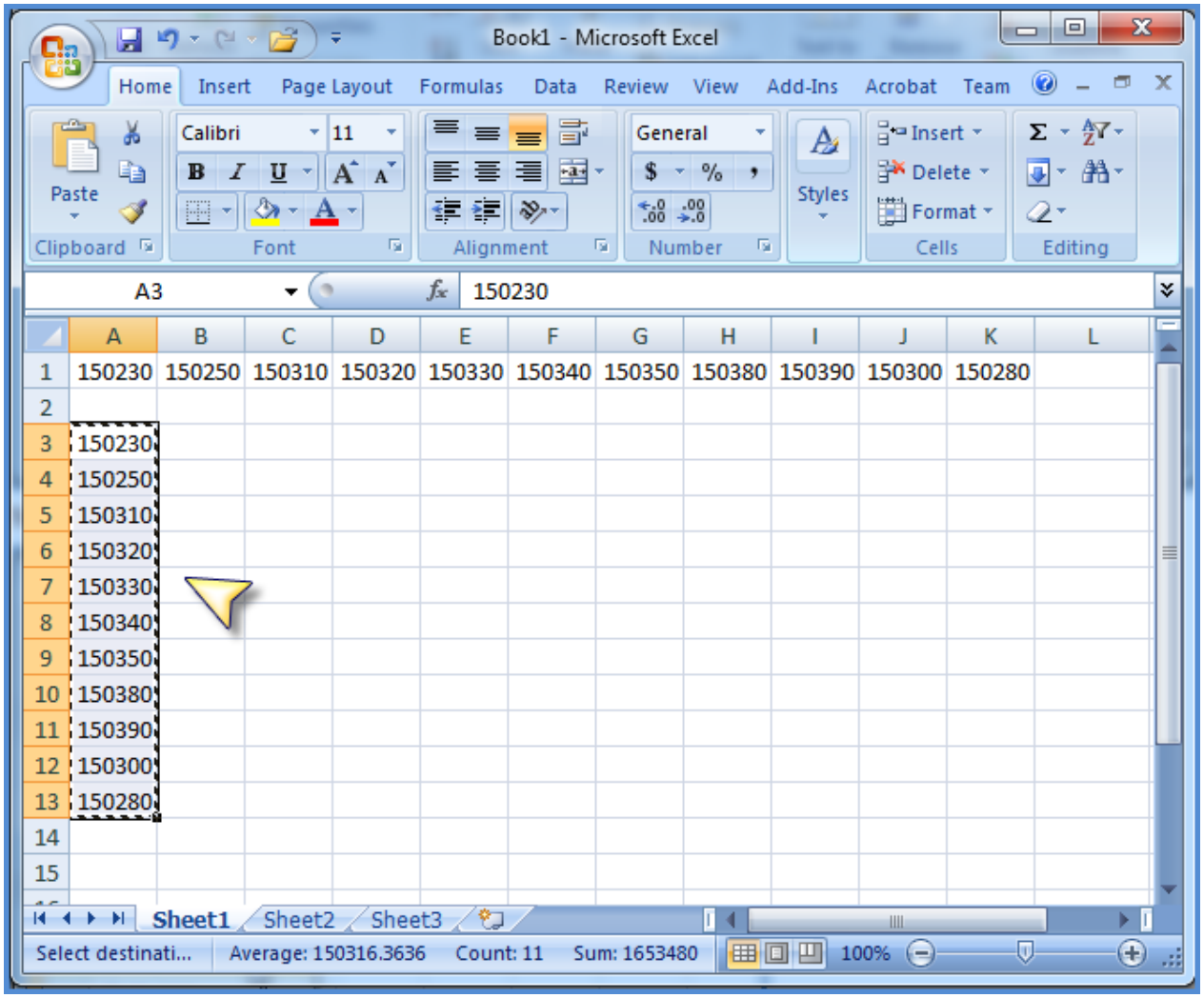
The text was imported into Excel to remove the commas.



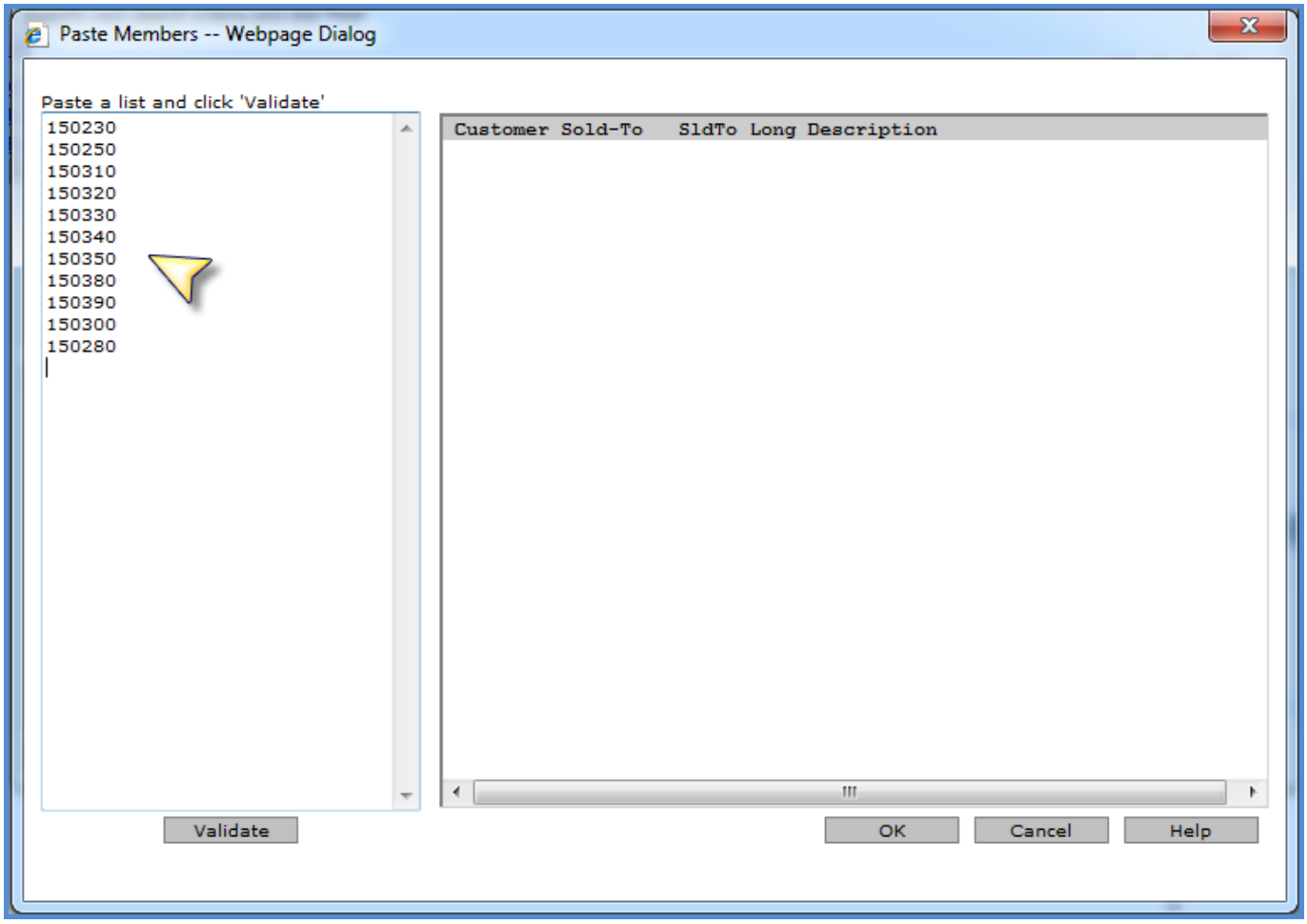


Then copied and pasted via a transpose to place the text into a single column.

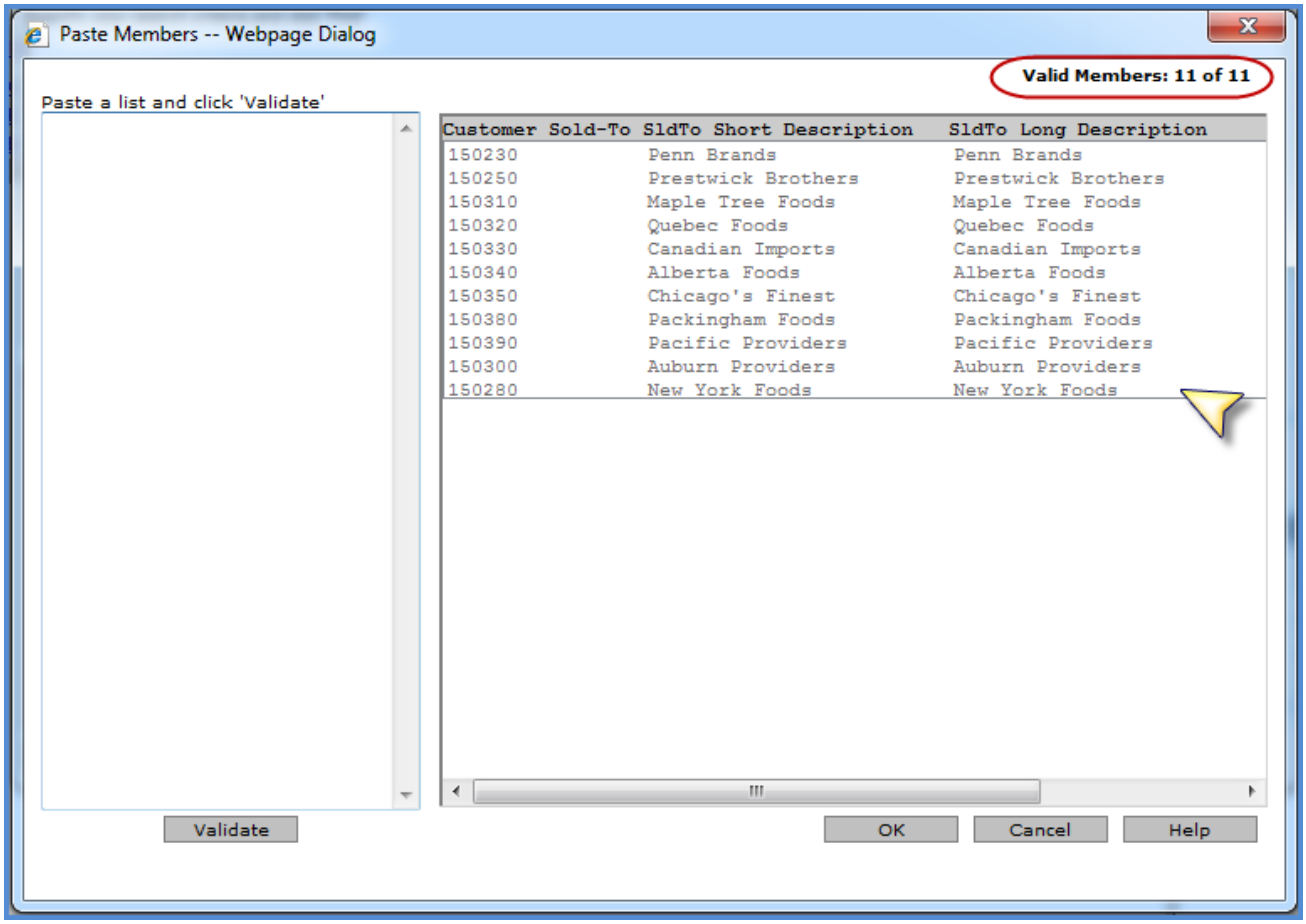




Then the text was copied from that column into the Paste Members window.



Here is the window after the Validate button was clicked. All members were valid and there were no duplicates.



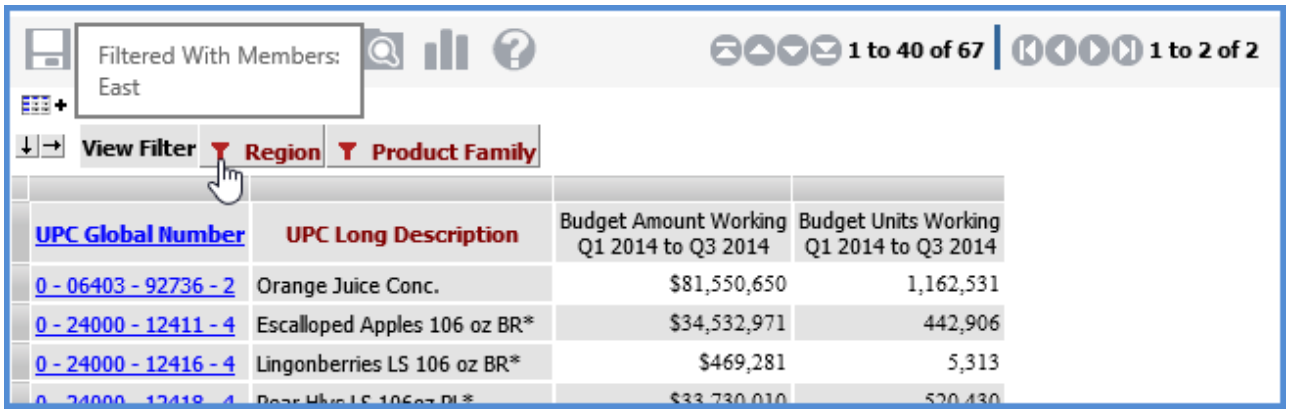
Recommendations for View Filters

Here are some behaviors and recommendations to consider when setting up view filters in your views.

- Multiple Levels in View Filters
- Calculated Measure Items and View Filters

Multiple Levels in View Filters

Levels in a View Filter need a level filter defined for them to have a filtering impact on a view. This is true whether there is a single level or multiple levels in the View Filter section. The following view has two levels in the View Filter. Region is filtered by a member list.



Product Family is filtered by a user list.

1 to 40 of 67 | 1 to 2 of 2

Filtered With User List: Product Family 60s

View Filter | Region | Product Family

UPC Global Number	UPC Long Description	Budget Amount Working Q1 2014 to Q3 2014	Budget Units Working Q1 2014 to Q3 2014
0 - 06403 - 92736 - 2	Orange Juice Conc.	$81,550,650	1,162,531
0 - 24000 - 12411 - 4	Escalloped Apples 106 oz BR*	$34,532,971	442,906
0 - 24000 - 12416 - 4	Lingonberries LS 106 oz BR*	$469,281	5,313
0 - 24000 - 12418 - 4	Pear Hlvs LS 106oz PL*	$33,730,010	520,430
0 - 24000 - 12419 - 4	Pear Hlvs LS 106 oz BR*	$11,305,509	144,914
0 - 24000 - 12422 - 4	Apple Filling 106oz BR*	$22,163,347	294,205
0 - 24000 - 12429 - 4	Apple Filling 12oz PL*	$28,872,651	810,503
0 - 24000 - 12430 - 4	Applesauce 106oz BR*	$25,244,052	327,925
0 - 24000 - 12431 - 4	Applesauce 106oz PL*	$101,809,018	1,622,014
0 - 24000 - 12432 - 4	Blackberries 106oz BR*	$9,353,277	106,127
0 - 24000 - 12438 - 4	Sw Cherries Pittd 106oz BR*	$23,900,987	243,269
0 - 24000 - 12440 - 4	Cherry Filling 106 oz BR*	$19,936,894	264,691
0 - 24000 - 12441 - 4	Peach Hlvs HS 106oz PL*	$265,508	4,083
0 - 24000 - 12443 - 4	Peach Slcs HS 12oz PL*	$968,593	25,087
0 - 24000 - 12446 - 4	Prunes Pitted 106 oz BR*	$1,568,703	20,365

The view results change if you remove the filter from either level. The following example shows the view after the member list filter was removed from Region. The view changed to show data for all Regions. The measure item values have increased, and the number of rows returned has increased from 67 to 72.

1 to 40 of 72 | 1 to 2 of 2

View Name: *View Filters 1*

View Filter | Region | Product Family

UPC Global Number	UPC Long Description	Budget Amount Working Q1 2014 to Q3 2014	Budget Units Working Q1 2014 to Q3 2014
0 - 06403 - 92736 - 2	Orange Juice Conc.	$107,866,368	1,540,531
0 - 24000 - 12411 - 4	Escalloped Apples 106 oz BR*	$44,870,327	575,424
0 - 24000 - 12416 - 4	Lingonberries LS 106 oz BR*	$469,281	5,313
0 - 24000 - 12418 - 4	Pear Hlvs LS 106oz PL*	$44,499,778	686,569
0 - 24000 - 12419 - 4	Pear Hlvs LS 106 oz BR*	$14,260,630	182,790
0 - 24000 - 12422 - 4	Apple Filling 106oz BR*	$27,243,730	361,620
0 - 24000 - 12429 - 4	Apple Filling 12oz PL*	$28,872,651	810,503
0 - 24000 - 12430 - 4	Applesauce 106oz BR*	$34,785,355	451,834
0 - 24000 - 12431 - 4	Applesauce 106oz PL*	$131,241,080	2,090,745
0 - 24000 - 12432 - 4	Blackberries 106oz BR*	$10,988,977	124,672
0 - 24000 - 12438 - 4	Sw Cherries Pittd 106oz BR*	$28,452,312	289,581

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Calculated Measure Items and View Filters

View Filters affect regular, calculated, and distinct calculated measure items. There is a special case in which a View Filter will not affect calculated and distinct calculated measure items. That case is when a level is used in both the View Filter and the expression for the calculated or distinct calculated measure item. In that case, the View Filter will not impact the calculated or distinct calculated measure item for that level.

The next view has a calculated measure item with an expression that uses the Region Unit level. The expression is ([Region].[Region].[Region].[331],[Measures].[Data2 (Budget Units Working)]).

1 to 40 of 102 | 1 to 3 of 3

View Name: *View Filters 2*

View Filter

UPC Global Number	UPC Long Description	Budget Amount Working Q1 2014 to Q3 2014	Budget Units Working Q1 2014 to Q3 2014	Budget Units Working Region West 331
0 - 02749 - 25408 - 6	Asparagus	$116,213,555	1,545,622	423,304
0 - 02749 - 99231 - 6	Strawberries	$79,942,688	1,075,169	295,140
0 - 02749 - 99267 - 6	Cherries, Bing	$96,154,822	1,285,136	333,385
0 - 06403 - 92736 - 2	Orange Juice Conc.	$107,866,368	1,540,531	378,000
0 - 13800 - 30321 - 9	Frozen Lasagna Dinner	$156,537,087	1,608,142	371,753
0 - 13800 - 78934 - 9	Meatloaf, Frozen	$150,581,441	1,605,166	348,240
0 - 24000 - 12411 - 4	Escalloped Apples 106 oz BR*	$44,870,327	575,424	132,518
0 - 24000 - 12413 - 4	Pnappl Slcs 12oz PL*	$56,224,002	1,416,572	
0 - 24000 - 12416 - 4	Lingonberries LS 106 oz BR*	$469,281	5,313	
0 - 24000 - 12417 - 4	Pnappl Slcs 106 oz BR*	$4,751,053	59,372	59,372
0 - 24000 - 12418 - 4	Pear Hlvs LS 106oz PL*	$44,499,778	686,569	166,139
0 - 24000 - 12419 - 4	Pear Hlvs LS 106 oz BR*	$14,260,630	182,790	37,876
0 - 24000 - 12422 - 4	Apple Filling 106oz BR*	$27,243,730	361,620	67,415
0 - 24000 - 12429 - 4	Apple Filling 12oz PL*	$28,872,651	810,503	
0 - 24000 - 12430 - 4	Applesauce 106oz BR*	$34,785,355	451,834	123,909
0 - 24000 - 12431 - 4	Applesauce 106oz PL*	$131,241,080	2,090,745	468,731
0 - 24000 - 12432 - 4	Blackberries 106oz BR*	$10,988,977	124,672	18,545
0 - 24000 - 12433 - 4	Pnappl Bites 106oz BR*	$498,477	6,223	6,223

Then the Region level, filtered by member 330, is set up as a View Filter. The View Filter is ignored for the calculated measure item -- notice the measure item values have not changed for the calculated measure item.

Filtered With Members: East

1 to 40 of 102 | 1 to 3 of 3

View Filter Region

UPC Global Number	UPC Long Description	Budget Amount Working Q1 2014 to Q3 2014	Budget Units Working Q1 2014 to Q3 2014	Budget Units Working Region West 331
0 - 02749 - 25408 - 6	Asparagus	$84,703,055	1,122,318	423,304
0 - 02749 - 99231 - 6	Strawberries	$57,858,450	780,030	295,140
0 - 02749 - 99267 - 6	Cherries, Bing	$71,429,033	951,752	333,385
0 - 06403 - 92736 - 2	Orange Juice Conc.	$81,550,650	1,162,531	378,000
0 - 13800 - 30321 - 9	Frozen Lasagna Dinner	$120,571,548	1,236,389	371,753
0 - 13800 - 78934 - 9	Meatloaf, Frozen	$118,012,867	1,256,926	348,240
0 - 24000 - 12411 - 4	Escalloped Apples 106 oz BR*	$34,532,971	442,906	132,518
0 - 24000 - 12413 - 4	Pnappl Slcs 12oz PL*	$56,224,002	1,416,572	
0 - 24000 - 12416 - 4	Lingonberries LS 106 oz BR*	$469,281	5,313	
0 - 24000 - 12417 - 4	Pnappl Slcs 106 oz BR*			59,372
0 - 24000 - 12418 - 4	Pear Hlvs LS 106oz PL*	$33,730,010	520,430	166,139
0 - 24000 - 12419 - 4	Pear Hlvs LS 106 oz BR*	$11,305,509	144,914	37,876
0 - 24000 - 12422 - 4	Apple Filling 106oz BR*	$22,163,347	294,205	67,415
0 - 24000 - 12429 - 4	Apple Filling 12oz PL*	$28,872,651	810,503	
0 - 24000 - 12430 - 4	Applesauce 106oz BR*	$25,244,052	327,925	123,909
0 - 24000 - 12431 - 4	Applesauce 106oz PL*	$101,809,018	1,622,014	468,731
0 - 24000 - 12432 - 4	Blackberries 106oz BR*	$9,353,277	106,127	18,545
0 - 24000 - 12433 - 4	Pnappl Bites 106oz BR*			6,223

Treat Attribute Relationship Data As Numbers In Views

Data for attribute relationships is typically treated as text (alphanumeric characters) in Stratum views, unless they are specifically designated to be treated as numbers. That can be done at the application level by administrators, as described in the Dimension maintenance section of help, or by any user in their individual views. See the steps below for changing settings within an individual view.

1. In the view where the attribute relationship exists, right-click and choose Properties from the menu that displays.

2. In the Data Type drop-down selection list of the Properties window, select Number.

3. Click OK in the Apply Changes window and save the view.

Here's a few other things to consider about this property. The type of information communicated by an attribute relationship and how you want it displayed in views and treated by sorts and filters helps you decide when to treat attribute relationships as numbers instead of text.

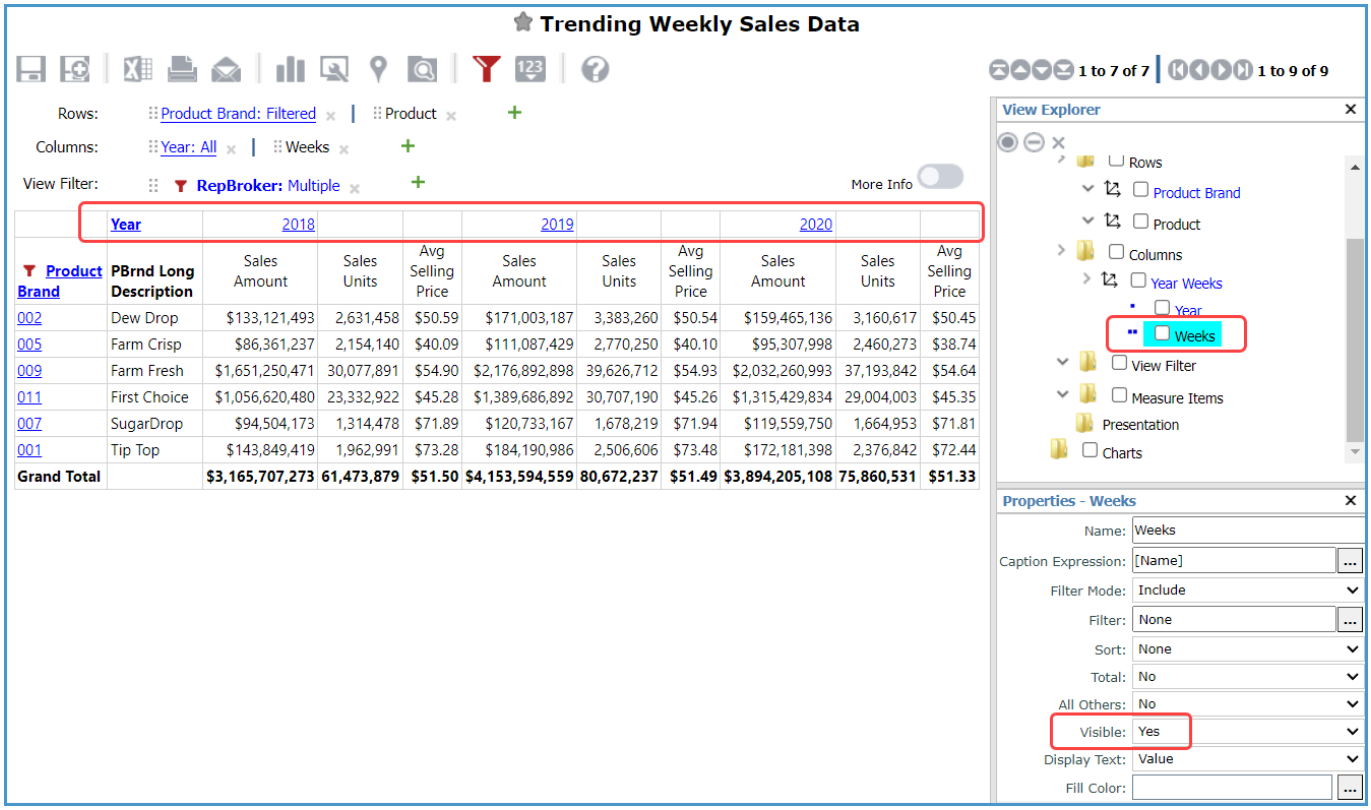
- If the attribute relationship conveys numerical data and its values consist of all numeric characters, consider setting their Data Type property to Number. Commodity codes or pricing data are examples of numerical data.
- If you want an attribute relationship's values to be treated as numeric for sorts and filters and displayed right aligned in a view's columns (like measure item values) and for exports to Excel that are set to be Excel Report output types, then set their Data Type property to Number.

Treatment of Time-Related Levels by the Filters Window

Time hierarchies in Stratum.Viewer can be multiple-level hierarchies or single level hierarchies. An example of a multiple-level hierarchy is Year Months with its Year and Months levels. An example of a single level hierarchy is the Months hierarchy with its Months level.

The following example shows how the Filters window treats second levels of multiple-level hierarchies in cases when the second level is not yet drilled to in a view and you filter the level from the window. Stratum.Viewer will drill to that level and apply your filter once you have exited the Filters window.

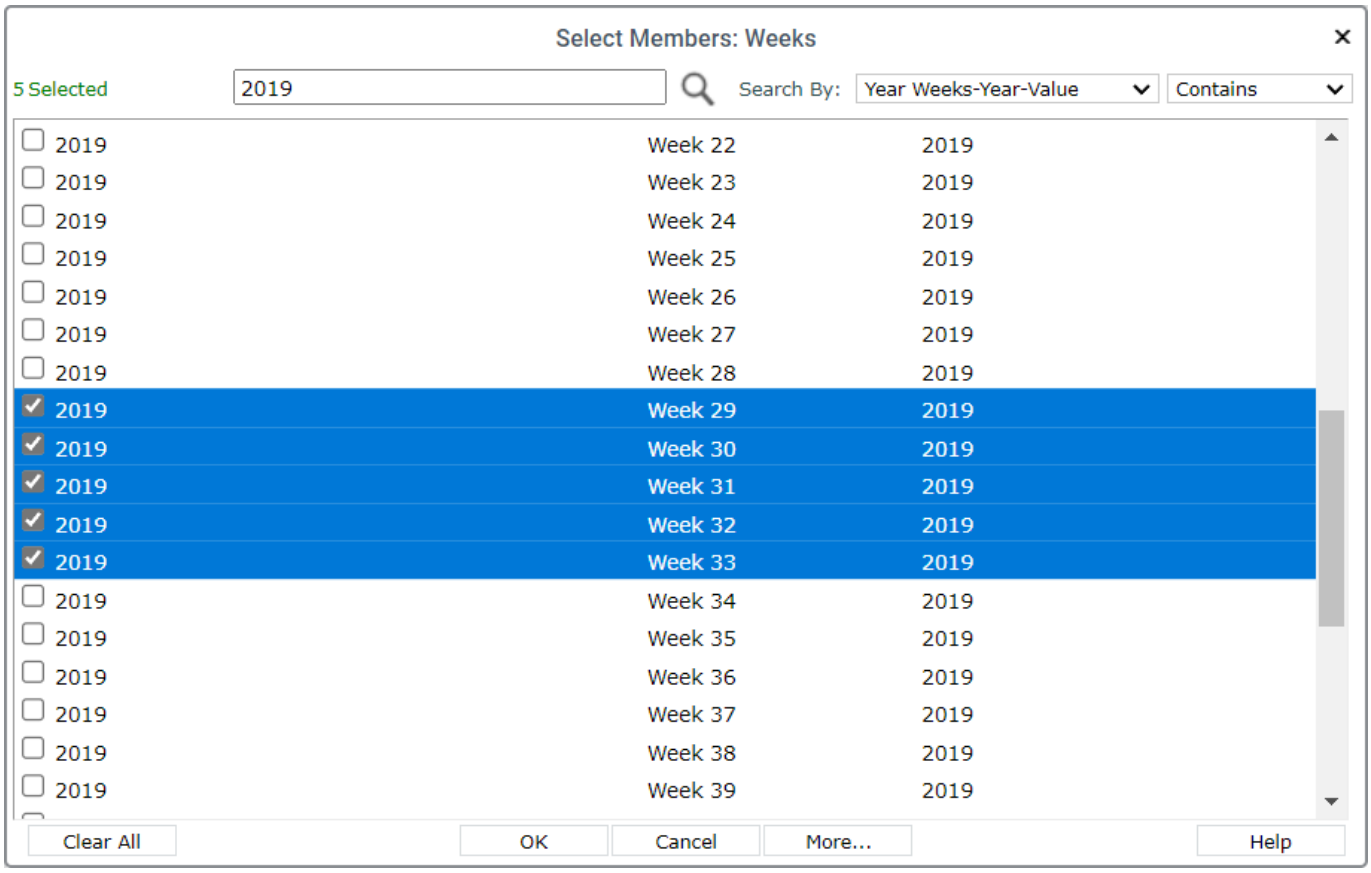
This view has the Year Weeks hierarchy on columns. The Year level is visible. The Weeks level is also defined to be available in the view (Visible property is set to Yes), but that level hasn't been drilled to yet.



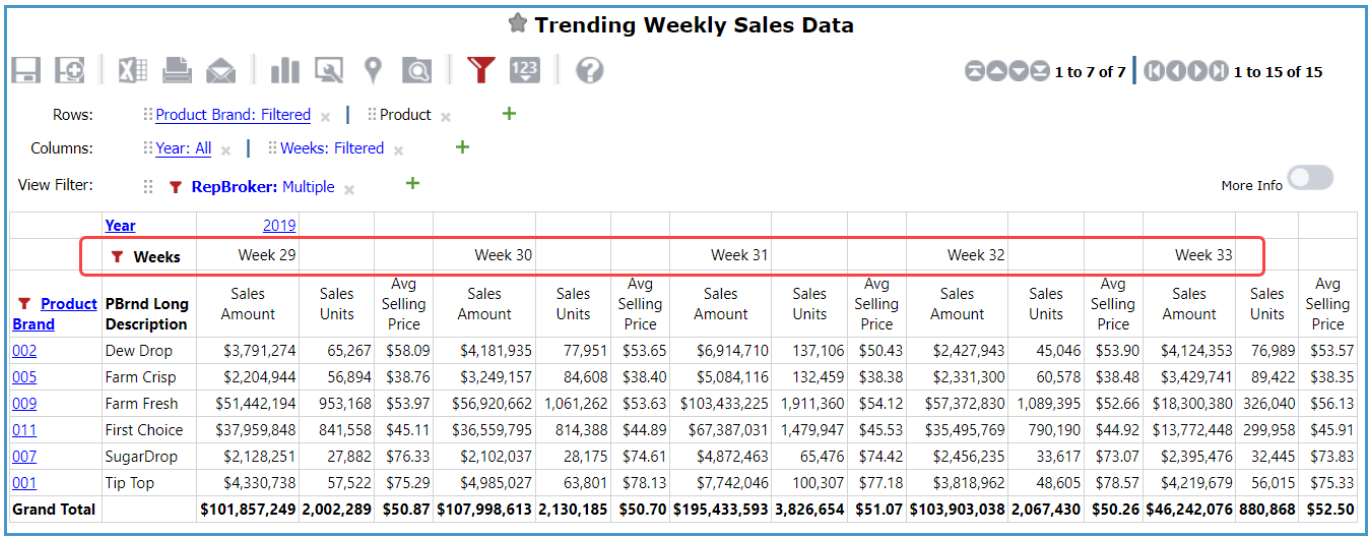
	Year	2018			2019			2020		
Product Brand	PBrnd Long Description	Sales Amount	Sales Units	Avg Selling Price	Sales Amount	Sales Units	Avg Selling Price	Sales Amount	Sales Units	Avg Selling Price
002	Dew Drop	$133,121,493	2,631,458	$50.59	$171,003,187	3,383,260	$50.54	$159,465,136	3,160,617	$50.45
005	Farm Crisp	$86,361,237	2,154,140	$40.09	$111,087,429	2,770,250	$40.10	$95,307,998	2,460,273	$38.74
009	Farm Fresh	$1,651,250,471	30,077,891	$54.90	$2,176,892,898	39,626,712	$54.93	$2,032,260,993	37,193,842	$54.64
011	First Choice	$1,056,620,480	23,332,922	$45.28	$1,389,686,892	30,707,190	$45.26	$1,315,429,834	29,004,003	$45.35
007	SugarDrop	$94,504,173	1,314,478	$71.89	$120,733,167	1,678,219	$71.94	$119,559,750	1,664,953	$71.81
001	Tip Top	$143,849,419	1,962,991	$73.28	$184,190,986	2,506,606	$73.48	$172,181,398	2,376,842	$72.44
Grand Total		**$3,165,707,273**	**61,473,879**	**$51.50**	**$4,153,594,559**	**80,672,237**	**$51.49**	**$3,894,205,108**	**75,860,531**	**$51.33**

The Manage All Filters icon is clicked to open the Filters window. All levels that are defined as visible display in the window; there are 5 of those levels including Year and Weeks.

The filter icon for Weeks is clicked, and a few weeks are selected as filters on the level from the Select Members window.



After clicking OK in the Select Members window and then OK in the Filters window, the view is refreshed. Notice that the view is now drilled to the Weeks level that you just filtered and the level reflects your filter.

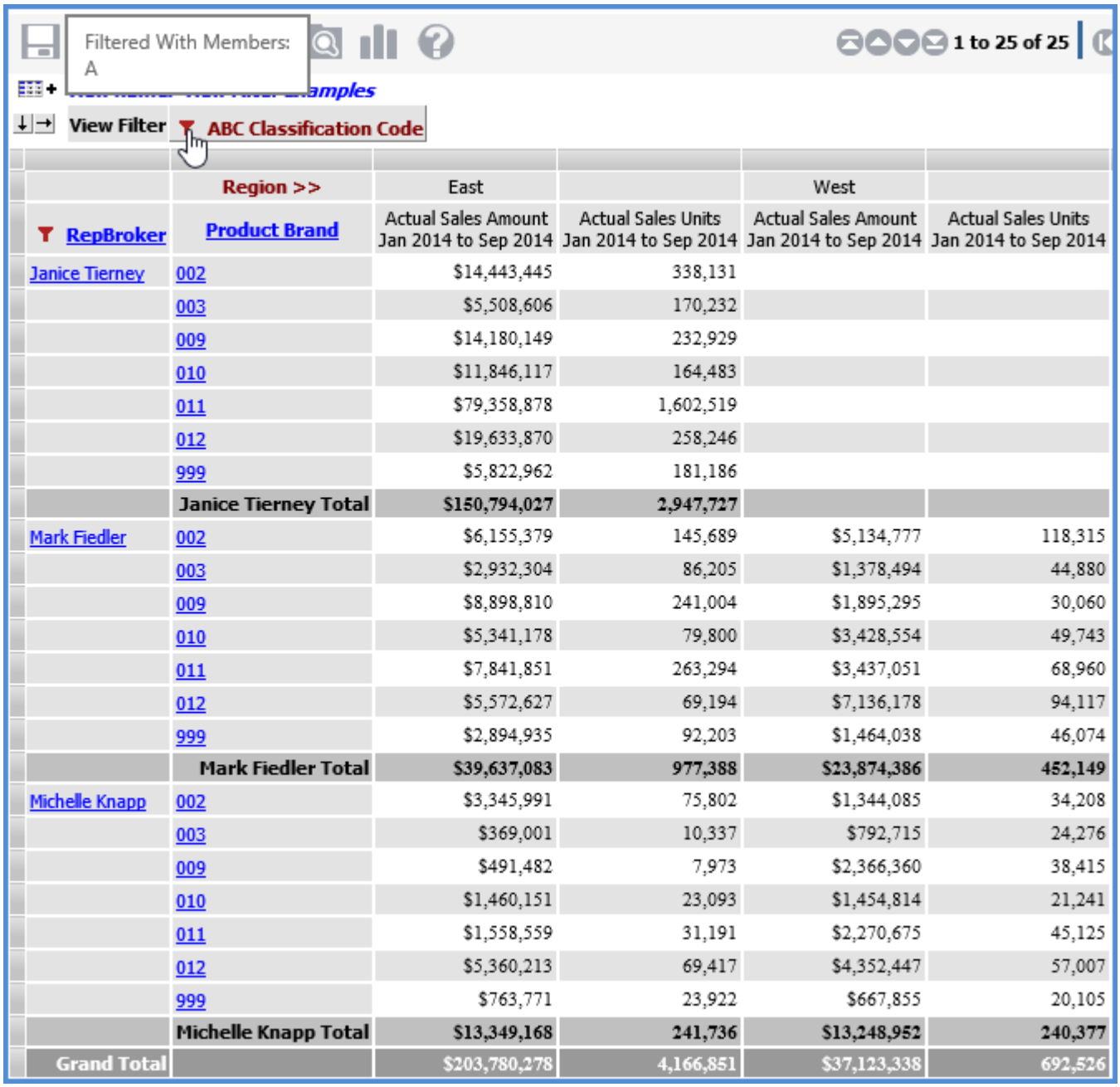


	Year	2019														
	Weeks	Week 29			Week 30			Week 31			Week 32			Week 33		
Product Brand	PBrnd Long Description	Sales Amount	Sales Units	Avg Selling Price	Sales Amount	Sales Units	Avg Selling Price	Sales Amount	Sales Units	Avg Selling Price	Sales Amount	Sales Units	Avg Selling Price	Sales Amount	Sales Units	Avg Selling Price
002	Dew Drop	$3,791,274	65,267	$58.09	$4,181,935	77,951	$53.65	$6,914,710	137,106	$50.43	$2,427,943	45,046	$53.90	$4,124,353	76,989	$53.57
005	Farm Crisp	$2,204,944	56,894	$38.76	$3,249,157	84,608	$38.40	$5,084,116	132,459	$38.38	$2,331,300	60,578	$38.48	$3,429,741	89,422	$38.35
009	Farm Fresh	$51,442,194	953,168	$53.97	$56,920,662	1,061,262	$53.63	$103,433,225	1,911,360	$54.12	$57,372,830	1,089,395	$52.66	$18,300,380	326,040	$56.13
011	First Choice	$37,959,848	841,558	$45.11	$36,559,795	814,388	$44.89	$67,387,031	1,479,947	$45.53	$35,495,769	790,190	$44.92	$13,772,448	299,958	$45.91
007	SugarDrop	$2,128,251	27,882	$76.33	$2,102,037	28,175	$74.61	$4,872,463	65,476	$74.42	$2,456,235	33,617	$73.07	$2,395,476	32,445	$73.83
001	Tip Top	$4,330,738	57,522	$75.29	$4,985,027	63,801	$78.13	$7,742,046	100,307	$77.18	$3,818,962	48,605	$78.57	$4,219,679	56,015	$75.33
Grand Total		**$101,857,249**	**2,002,289**	**$50.87**	**$107,998,613**	**2,130,185**	**$50.70**	**$195,433,593**	**3,826,654**	**$51.07**	**$103,903,038**	**2,067,430**	**$50.26**	**$46,242,076**	**880,868**	**$52.50**

Using a View Filters vs. a Level Filter

Use a view filter when you want the filter to be in effect no matter what other levels are visible in the view. The view filter will filter the entire view regardless of the levels that have been drilled to in the view. Use a level filter when you want to filter a particular level and any levels under that level in the view drill down path. Filters on individual levels are only active when you have drilled to that level in the view.

This view has a view filter that consists of member A from the ABC Classification Code level.



	Region >>	East		West	
RepBroker	Product Brand	Actual Sales Amount Jan 2014 to Sep 2014	Actual Sales Units Jan 2014 to Sep 2014	Actual Sales Amount Jan 2014 to Sep 2014	Actual Sales Units Jan 2014 to Sep 2014
Janice Tierney	002	$14,443,445	338,131		
	003	$5,508,606	170,232		
	009	$14,180,149	232,929		
	010	$11,846,117	164,483		
	011	$79,358,878	1,602,519		
	012	$19,633,870	258,246		
	999	$5,822,962	181,186		
	Janice Tierney Total	**$150,794,027**	**2,947,727**		
Mark Fiedler	002	$6,155,379	145,689	$5,134,777	118,315
	003	$2,932,304	86,205	$1,378,494	44,880
	009	$8,898,810	241,004	$1,895,295	30,060
	010	$5,341,178	79,800	$3,428,554	49,743
	011	$7,841,851	263,294	$3,437,051	68,960
	012	$5,572,627	69,194	$7,136,178	94,117
	999	$2,894,935	92,203	$1,464,038	46,074
	Mark Fiedler Total	**$39,637,083**	**977,388**	**$23,874,386**	**452,149**
Michelle Knapp	002	$3,345,991	75,802	$1,344,085	34,208
	003	$369,001	10,337	$792,715	24,276
	009	$491,482	7,973	$2,366,360	38,415
	010	$1,460,151	23,093	$1,454,814	21,241
	011	$1,558,559	31,191	$2,270,675	45,125
	012	$5,360,213	69,417	$4,352,447	57,007
	999	$763,771	23,922	$667,855	20,105
	Michelle Knapp Total	**$13,349,168**	**241,736**	**$13,248,952**	**240,377**
Grand Total		**$203,780,278**	**4,166,851**	**$37,123,338**	**692,526**

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Wherever you drill to in the view, you will see data relevant to member A. Here is the same view after drilling up from Product Brand to RepBroker. Notice the grand totals are the same as they were in the prior state of the view.

View Name: *View Filter Examples*

View Filter ABC Classification Code

Region >>	East		West	
RepBroker	Actual Sales Amount Jan 2014 to Sep 2014	Actual Sales Units Jan 2014 to Sep 2014	Actual Sales Amount Jan 2014 to Sep 2014	Actual Sales Units Jan 2014 to Sep 2014
Janice Tierney	$150,794,027	2,947,727		
Mark Fiedler	$39,637,083	977,388	$23,874,386	452,149
Michelle Knapp	$13,349,168	241,736	$13,248,952	240,377
Grand Total	$203,780,278	4,166,851	$37,123,338	692,526

Here is the same view with the ABC Classification Code level positioned on rows, still filtered for member A. The level is visible, so the filter is in effect.

View Name: *View Filter Examples*

View Filter

	Region >>	East		West	
RepBroker	ABC Classification Code	Actual Sales Amount Jan 2014 to Sep 2014	Actual Sales Units Jan 2014 to Sep 2014	Actual Sales Amount Jan 2014 to Sep 2014	Actual Sales Units Jan 2014 to Sep 2014
Janice Tierney	A	$150,794,027	2,947,727		
	Janice Tierney Total	$150,794,027	2,947,727		
Mark Fiedler	A	$39,637,083	977,388	$23,874,386	452,149
	Mark Fiedler Total	$39,637,083	977,388	$23,874,386	452,149
Michelle Knapp	A	$13,349,168	241,736	$13,248,952	240,377
	Michelle Knapp Total	$13,349,168	241,736	$13,248,952	240,377
Grand Total		$203,780,278	4,166,851	$37,123,338	692,526

When you drill up in the view, the ABC Classification Code level is hidden; therefore, the ABC Classification Code filter is no longer active. Notice the grand totals are higher than what they were in the prior state of the view. That is because all measure items values for the RepBrokers are being returned versus just the values for items with an ABC Classification Code of A.

View Name: *View Filter Examples*

View Filter

Region >>	East		West	
RepBroker	Actual Sales Amount Jan 2014 to Sep 2014	Actual Sales Units Jan 2014 to Sep 2014	Actual Sales Amount Jan 2014 to Sep 2014	Actual Sales Units Jan 2014 to Sep 2014
Janice Tierney	$540,557,780	10,180,005		
Mark Fiedler	$142,534,177	3,207,275	$75,915,384	1,485,722
Michelle Knapp	$41,236,689	823,724	$52,627,779	985,602
Grand Total	$724,328,646	14,211,004	$128,543,163	2,471,324

Using Relationship and Empty Filters

An overview of relationship and empty filters is provided below. Additional information is provided about when to use them and how the filters behave depending on other characteristics of a view. See these sections:

- Period Based Views
- All Others Data and Empty Filters
- Null vs. Non-null Values and Empty Filters
- Calculated Measure Items
- Views with Levels and Measure Items on the Same Axis
- Level Filters and Relationship Filters
- View Filters

Overview

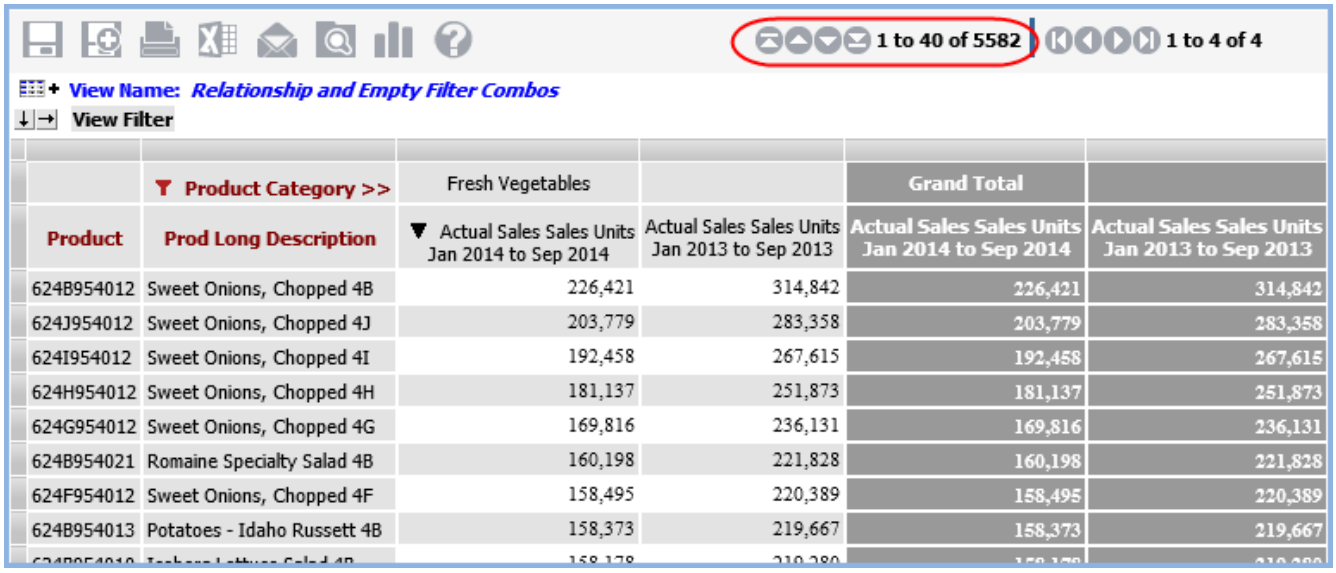
Use the Relationship and Empty Filters to filter out members of a result set where no related data exists. Related data is based on the visible measure items of the view. Filtering out those members where no data exists related to the measure items in the view produces a more focused result set.

By default, the Relationship and Empty Filter properties are enabled (Yes) for rows and columns. If you wanted to see all members on an axis regardless of related data, you would set the Relationship and Empty Filter properties to No. These properties are controlled through the Properties windows for rows and columns.

For example, in a view displaying the current year YTD sales by product and where the Relationship and Empty Filters are enabled, the result set would include only product members that have sales for the current year (related data). When the Relationship and Empty Filter are disabled, the result set would include all products -- those that have sales as well as those that don't have sales.

Relationship Filter and Empty Filter = No

Here is the example view with both properties set to No, returning all products. Results show products with and without YTD sales.



	Product Category >>	Fresh Vegetables		Grand Total	
Product	Prod Long Description	Actual Sales Sales Units Jan 2014 to Sep 2014	Actual Sales Sales Units Jan 2013 to Sep 2013	Actual Sales Sales Units Jan 2014 to Sep 2014	Actual Sales Sales Units Jan 2013 to Sep 2013
624B954012	Sweet Onions, Chopped 4B	226,421	314,842	226,421	314,842
624J954012	Sweet Onions, Chopped 4J	203,779	283,358	203,779	283,358
624I954012	Sweet Onions, Chopped 4I	192,458	267,615	192,458	267,615
624H954012	Sweet Onions, Chopped 4H	181,137	251,873	181,137	251,873
624G954012	Sweet Onions, Chopped 4G	169,816	236,131	169,816	236,131
624B954021	Romaine Specialty Salad 4B	160,198	221,828	160,198	221,828
624F954012	Sweet Onions, Chopped 4F	158,495	220,389	158,495	220,389
624B954013	Potatoes - Idaho Russett 4B	158,373	219,667	158,373	219,667

Relationship Filter = Yes and Empty Filter = No

Here is the view when just the Relationship is set to Yes. The row count has decreased because results now show only the products that have YTD sales.

1 to 40 of 5536 | 1 to 4 of 4

View Name: *Relationship and Empty Filter Combos*

View Filter

	Product Category >>	Fresh Vegetables		Grand Total	
Product	Prod Long Description	Actual Sales Sales Units Jan 2014 to Sep 2014	Actual Sales Sales Units Jan 2013 to Sep 2013	Actual Sales Sales Units Jan 2014 to Sep 2014	Actual Sales Sales Units Jan 2013 to Sep 2013
624B954012	Sweet Onions, Chopped 4B	226,421	314,842	226,421	314,842
624J954012	Sweet Onions, Chopped 4J	203,779	283,358	203,779	283,358
624I954012	Sweet Onions, Chopped 4I	192,458	267,615	192,458	267,615
624H954012	Sweet Onions, Chopped 4H	181,137	251,873	181,137	251,873
624G954012	Sweet Onions, Chopped 4G	169,816	236,131	169,816	236,131
624B954021	Romaine Specialty Salad 4B	160,198	221,828	160,198	221,828
624F954012	Sweet Onions, Chopped 4F	158,495	220,389	158,495	220,389
624B954013	Potatoes - Idaho Russett 4B	158,373	219,667	158,373	219,667
624B954010	Iceberg Lettuce Salad 4B	158,178	219,280	158,178	219,280
624F954012	Sweet Onions, Chopped 4F	147,174	204,647	147,174	204,647

Relationship Filter and Empty Filter = Yes

Here is the view when Empty Filter also is set to Yes. The row count is only 250 after this change because the view only returns products that have YTD sales given the level and member(s) on columns. In this case, returning only products with YTD sales for the Fresh Vegetables member of Product Category.

1 to 40 of 250 | 1 to 4 of 4

View Name: *Relationship and Empty Filter Combos*

View Filter

	Product Category >>	Fresh Vegetables		Grand Total	
Product	Prod Long Description	Actual Sales Sales Units Jan 2014 to Sep 2014	Actual Sales Sales Units Jan 2013 to Sep 2013	Actual Sales Sales Units Jan 2014 to Sep 2014	Actual Sales Sales Units Jan 2013 to Sep 2013
624B954012	Sweet Onions, Chopped 4B	226,421	314,842	226,421	314,842
624J954012	Sweet Onions, Chopped 4J	203,779	283,358	203,779	283,358
624I954012	Sweet Onions, Chopped 4I	192,458	267,615	192,458	267,615
624H954012	Sweet Onions, Chopped 4H	181,137	251,873	181,137	251,873
624G954012	Sweet Onions, Chopped 4G	169,816	236,131	169,816	236,131
624B954021	Romaine Specialty Salad 4B	160,198	221,828	160,198	221,828
624F954012	Sweet Onions, Chopped 4F	158,495	220,389	158,495	220,389
624B954013	Potatoes - Idaho Russett 4B	158,373	219,667	158,373	219,667
624B954010	Iceberg Lettuce Salad 4B	158,178	219,280	158,178	219,280

Period Based Views

For period based views that have levels from time hierarchies visible on rows or columns, it is recommended that you set the Relationship Filter and Empty Filter properties to No for the axis where the time levels are used. This will ensure that all periods will display in the view, even those for which no data exists.

Example 1

Levels from the Weeks time hierarchy are on rows in this view. Both Relationship and Empty Filter are No, which means all weeks display -- even those where there is no related data. Rows for all 52 weeks display in calendar order.

1 to 40 of 57 | 1 to 6 of 6 | Viewer

View Name: *Weekly Sales with EmptyFilter*

View Filter

Product >>	620A914004		All Others		Grand Total	
Prod Long Description	FrtCktail HS 12 oz BR* 0A					
Weeks	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units
Week 1			$270,847,881	4,747,679	$270,847,881	4,747,679
Week 2			$262,296,006	4,675,739	$262,296,006	4,675,739
Week 3			$262,573,713	4,684,978	$262,573,713	4,684,978
Week 4			$264,434,998	4,716,801	$264,434,998	4,716,801
Week 5	$3,851	87	$465,723,116	8,337,493	$465,726,967	8,337,580
Week 6	$3,851	87	$228,126,968	4,129,746	$228,130,818	4,129,833
Week 7	$6,595	149	$233,485,768	4,229,869	$233,492,364	4,230,018
Week 8	$3,851	87	$232,594,744	4,204,751	$232,598,595	4,204,838
Week 9	$10,796	244	$430,329,745	7,780,639	$430,340,541	7,780,883
Week 10	$3,985	91	$223,440,646	4,057,691	$223,444,632	4,057,781
Week 11	$3,985	91	$235,359,251	4,276,195	$235,363,236	4,276,285
Week 12	$3,985	91	$239,654,553	4,358,835	$239,658,538	4,358,926
Week 13	$11,070	252	$239,618,440	4,371,923	$239,629,510	4,372,174
Week 14	$3,985	91	$400,946,905	7,264,802	$400,950,890	7,264,893
Week 15			$239,073,564	4,326,664	$239,073,564	4,326,664
Week 16			$257,422,344	5,615,653	$257,422,344	5,615,653
Week 17			$254,074,802	4,612,384	$254,074,802	4,612,384
Week 18			$475,959,021	8,605,724	$475,959,021	8,605,724

Here is the same view with Relationship and Empty Filter set to Yes. Only the weeks that have related data display.

1 to 29 of 29 | 1 to 6 of 6 | Viewer

View Name: *Weekly Sales with EmptyFilter*

View Filter

Product >>	620A914004		All Others		Grand Total	
Prod Long Description	FrtCktail HS 12 oz BR* 0A					
Weeks	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units	Actual Sales Sales Amount	Actual Sales Sales Units
Week 5	$3,851	87	$465,723,116	8,337,493	$465,726,967	8,337,580
Week 6	$3,851	87	$228,126,968	4,129,746	$228,130,818	4,129,833
Week 7	$6,595	149	$233,485,768	4,229,869	$233,492,364	4,230,018
Week 8	$3,851	87	$232,594,744	4,204,751	$232,598,595	4,204,838
Week 9	$10,796	244	$430,329,745	7,780,639	$430,340,541	7,780,883
Week 10	$3,985	91	$223,440,646	4,057,691	$223,444,632	4,057,781
Week 11	$3,985	91	$235,359,251	4,276,195	$235,363,236	4,276,285
Week 12	$3,985	91	$239,654,553	4,358,835	$239,658,538	4,358,926
Week 13	$11,070	252	$239,618,440	4,371,923	$239,629,510	4,372,174
Week 14	$3,985	91	$400,946,905	7,264,802	$400,950,890	7,264,893
Week 31	$1,474	34	$666,132,486	11,923,043	$666,133,960	11,923,077
Week 32	$1,474	34	$314,153,761	5,589,879	$314,155,235	5,589,913

Example 2

Levels from the Year Months time hierarchy are on rows in this view. Here is the view where both Relationship and Empty Filter are No, which means the rows for December through October of 2014 still display even though there is no related data yet for those months (the current month of the year is September, so no data exists yet for the months after that current month).

View Name: *Period Based Rel and EmptyFilter*

View Filter

Year	Months	Actual Sales Sales Amount	Actual Sales Sales Units
2014	January	$350,714,364	6,258,847
	February	$322,332,391	5,825,361
	March	$361,004,874	6,553,215
	April	$327,807,806	6,867,712
	May	$352,020,685	7,798,802
	June	$375,671,295	8,910,194
	July	$391,977,666	9,613,083
	August	$485,764,510	12,744,274
	September	$569,861,272	12,093,515
	October		
	November		
	December		
	2014 Total	**$3,537,154,864**	**76,665,003**
2013	January	$650,655,727	11,579,068
	February	$549,211,669	9,929,320
	March	$652,242,257	11,862,018
	April	$645,861,506	11,733,747
	May	$468,934,747	8,413,481

Here is the same view with Relationship and Empty Filter set to Yes.

View Name: *Period Based Rel and EmptyFilter*

View Filter

Year	Months	Actual Sales Sales Amount	Actual Sales Sales Units
2014	January	$350,714,364	6,258,847
	February	$322,332,391	5,825,361
	March	$361,004,874	6,553,215
	April	$327,807,806	6,867,712
	May	$352,020,685	7,798,802
	June	$375,671,295	8,910,194
	July	$391,977,666	9,613,083
	August	$485,764,510	12,744,274
	September	$569,861,272	12,093,515
	2014 Total	**$3,537,154,864**	**76,665,003**
2013	January	$650,655,727	11,579,068
	February	$549,211,669	9,929,320
	March	$652,242,257	11,862,018
	April	$645,861,506	11,733,747
	May	$468,934,747	8,413,481

All Others Data and Empty Filters

The Empty Filter setting has no impact on All Others rows and columns. If an All Others row or column has no data and Empty Filter is set to Yes, that empty row or column will remain in the view.

View Name: *All Others and Empty Filters*

View Filter

Ship-To Territory	STerr Long Description	Daily Sales Amount Jun 17 2014 to Sep 15 2014	Daily Sales Units Jun 17 2014 to Sep 15 2014
1100	Southwest	$1,083,805	21,737
1101	South Central	$2,429,386	55,702
1102	Gulf Coast	$1,446,060	31,767
1103	Midlantic	$1,560,213	35,775
1104	New England	$3,145,793	71,858
1105	Great Lakes	$447,905	9,307
1106	Great Plains	$1,570,445	35,951
1107	Northwest	$1,023,632	21,883
1108	Western Provinces	$1,169,909	27,338
1109	Central Provinces	$1,516,509	31,967
1111	Eastern Atlantic Provinces	$2,550,581	57,743
All Others			
Grand Total		$17,944,239	401,028

View Explorer

- All Others and Empty Filters
  - Parameter Groups
  - Grid
    - Rows
      - Ship-To Territory
      - Product ABC Class
      - Product

Properties - Rows

Drilldown View	None
Repeating Values	No
Totals Default	Yes
All Others Default	Yes
Relationship Filter	Yes
Empty Filter	Yes
Axis Filter	

Null vs. Non-null Values and Empty Filters

The Empty Filter only considers cells to be empty when they have null or no data in them. Cells with zero (0) or text are not considered empty and therefore will not be excluded from the result set.

Calculated Measure Items

The Relationship Filter considers all visible measure items (regular and calculated) when determining which members to include in the result set. This means that each calculated measure item expression is performed for all members. In cases where the expression contains a constant or an attribute relationship, this can cause an unexpected result set. In cases where the expression is time consuming, view performance can be impacted.

When an expression contains a constant or an attribute relationship, the calculated measure item produces a non-null value for every member, this results in the Relationship Filter not excluding any members from the result set since every member has "related" data. For example, if a calculated measure item expression includes an attribute relationship, then every member will have related data. You can set up conditions in the expression for the calculated measure item to be executed only under certain conditions. An example follows.

The Extended List Price measure item in the next view is a calculated measure item which has the expression:

[Product].[Product].Properties("Prod Current List Price") * [Measures].[Data13 (Actual Sales Sales Units Jan 2014 to Sep 2014)]

The Prod Current List Price in the expression is an attribute relationship. Every product has a list price, which means every product will have an Extended List Price result and no rows will be removed from the view by the relationship filter. If the calculation is made conditional to only execute when YTD sales units exists, then the view will contain only those products that have YTD sales units.

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View Name: *Calculations and Rel/Empty Filters*

View Filter

Product	Prod Current List Price	Actual Sales Sales Units Jan 2014 to Sep 2014	Ext List Price
Applesauce 106oz PL* 5B	65	286,688	$18,634,709.28
Pnappl Slcs 12 oz BR* 5B	48	261,553	$12,554,536.11
Peach Slcs LS 12oz BR* 5B	47	259,604	$12,201,387.43
Applesauce 106oz PL* 5J	65	258,019	$16,771,238.53
Applesauce 106oz PL* 5I	65	243,685	$15,839,502.93
Applesauce 12oz PL* 5B	41	243,543	$9,985,255.10
Frozen Lasagna Dinner 4B	109	238,731	$26,021,686.76
Meatloaf, Frozen 4B	107	238,676	$25,538,319.52
Apples Red Delicious 4B	46	237,311	$10,916,327.65
Pnappl Slcs 12 oz BR* 5J	48	235,398	$11,299,082.64
Peach Slcs LS 12oz BR* 5J	47	233,644	$10,981,248.78
Applesauce 106oz PL* 5H	65	229,350	$14,907,767.44

EXPRESSION - EXT LIST PRICE

View Items and Functions

- Hierarchies
  - Product
    - Product
      - Attribute Relationships
        - Prod Long Description
        - Prod Current List Price
      - Members
  - Product Brand
  - Product Category
  - Product ABC Class
  - Product Category Role

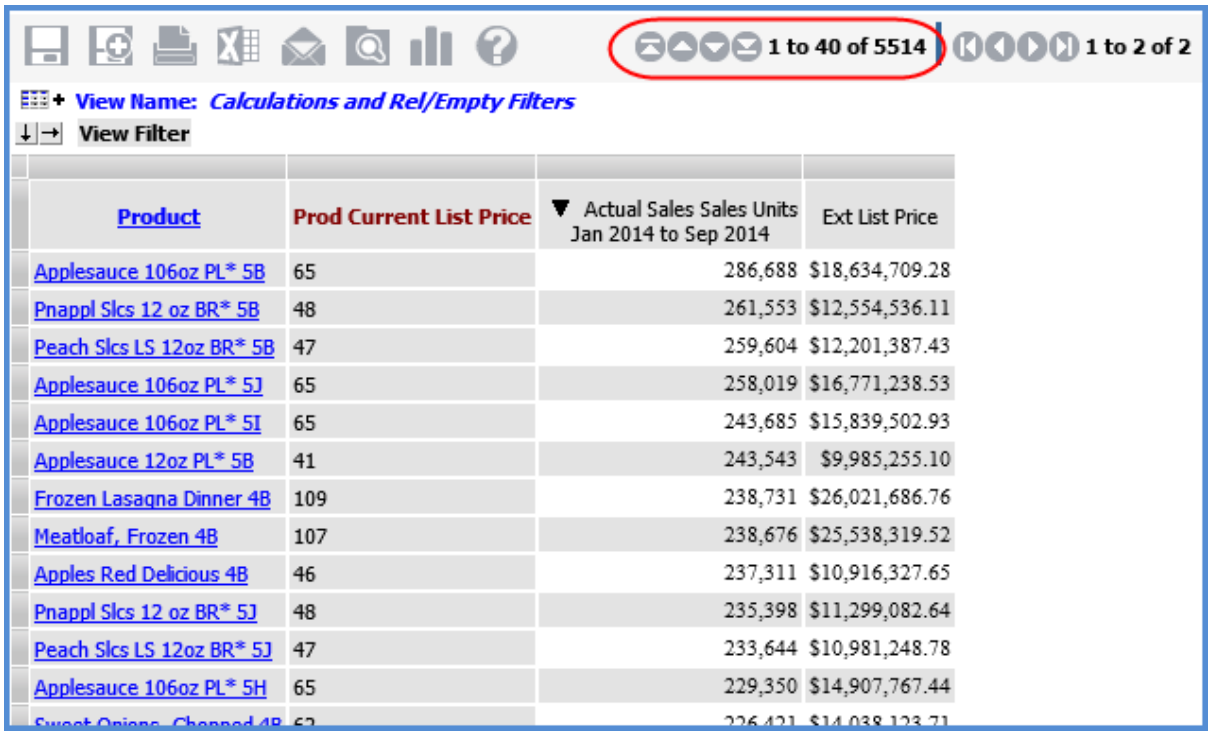
Expression

```
[Product].[Product].Properties("Prod Current List Price") *
[Measures].[Data13 (Actual Sales Sales Units Jan 2014 to
Sep 2014)]
```

Here is the expression, modified to check for YTD sales units. This optimized expression will not proceed with the expression calculation in cases where no YTD Sales Units exists

IIF([Measures].[Data13 (Actual Sales Sales Units Jan 2014 to Sep 2014)] <> Null, [Product].[Product].Properties("Prod Current List Price") * [Measures].[Data13 (Actual Sales Sales Units Jan 2014 to Sep 2014)], null)

Here is the updated view, which now has fewer rows because the relationship filter removed rows without YTD Sales units.



Product	Prod Current List Price	Actual Sales Sales Units Jan 2014 to Sep 2014	Ext List Price
Applesauce 106oz PL* 5B	65	286,688	$18,634,709.28
Pnappl Slcs 12 oz BR* 5B	48	261,553	$12,554,536.11
Peach Slcs LS 12oz BR* 5B	47	259,604	$12,201,387.43
Applesauce 106oz PL* 5J	65	258,019	$16,771,238.53
Applesauce 106oz PL* 5I	65	243,685	$15,839,502.93
Applesauce 12oz PL* 5B	41	243,543	$9,985,255.10
Frozen Lasagna Dinner 4B	109	238,731	$26,021,686.76
Meatloaf, Frozen 4B	107	238,676	$25,538,319.52
Apples Red Delicious 4B	46	237,311	$10,916,327.65
Pnappl Slcs 12 oz BR* 5J	48	235,398	$11,299,082.64
Peach Slcs LS 12oz BR* 5J	47	233,644	$10,981,248.78
Applesauce 106oz PL* 5H	65	229,350	$14,907,767.44
Sweet Onions, Chopped 4B	62	226,421	$14,038,123.71

The next view contains YTD calculated measure items for sales amount and units. The expressions for both measure items use named sets and therefore were optimized by making them conditional based on the existence of related data. The YTD calculations will execute only when Actual Sales Sales Amount and Actual Sales Sales Units respectively are not null. Here is the expression for the YTD Sales Amount measure item. A similar expression was used for the YTD Sales Units measure item.

IIF([Measures].[Data1 (Actual Sales Sales Amount)] = null, null, Sum(CrossJoin({[Time].[Year Based Months Based].[Year Based].[Current Year]},{[Act Sales YTD Months]}),[Measures].[Data1 (Actual Sales Sales Amount)]))

View Name: *RepBroker YTD Sales $ and Units*

View Filter

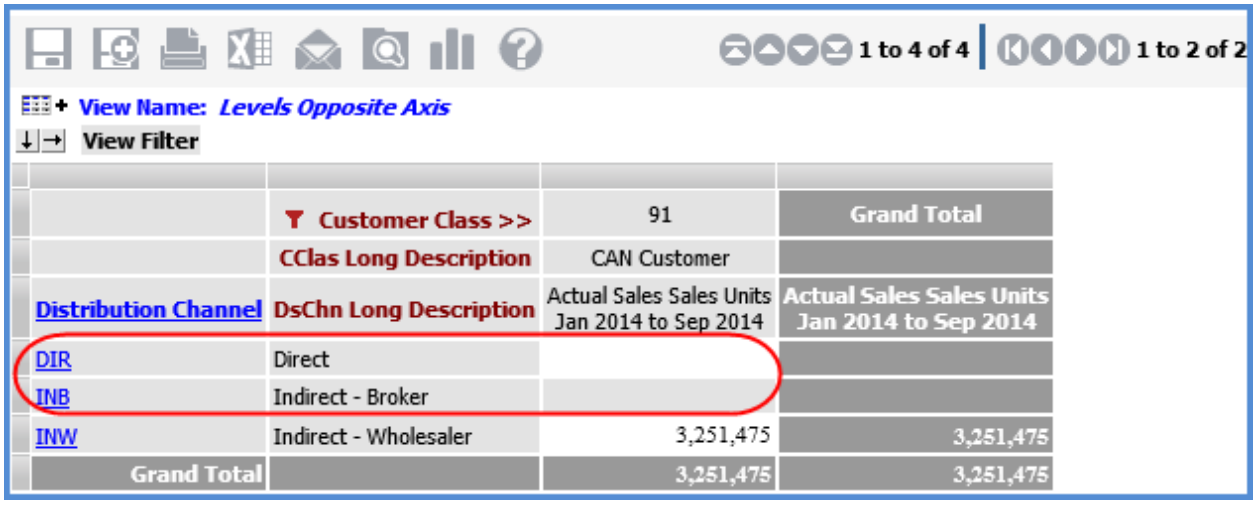
RepBroker	YTD Sales Amount	YTD Sales Units
300	$1,236,249,042	31,341,259
301	$80,279,499	1,689,678
302	$218,449,561	4,692,998
303	$93,864,469	1,809,326
304	$94,960,867	1,875,791
305	$540,557,780	10,180,005
306	$123,739,278	2,390,317
307	$36,226,887	704,599
308	$95,845,090	1,841,984
309	$78,406,950	1,562,082
312	$335,926,577	7,375,334
313	$446,627,746	8,058,285
315	$112,408,366	2,282,187
318	$43,612,752	861,157
Grand Total	$3,537,154,864	76,665,003

Views with Levels and Measure Items on the Same Axis

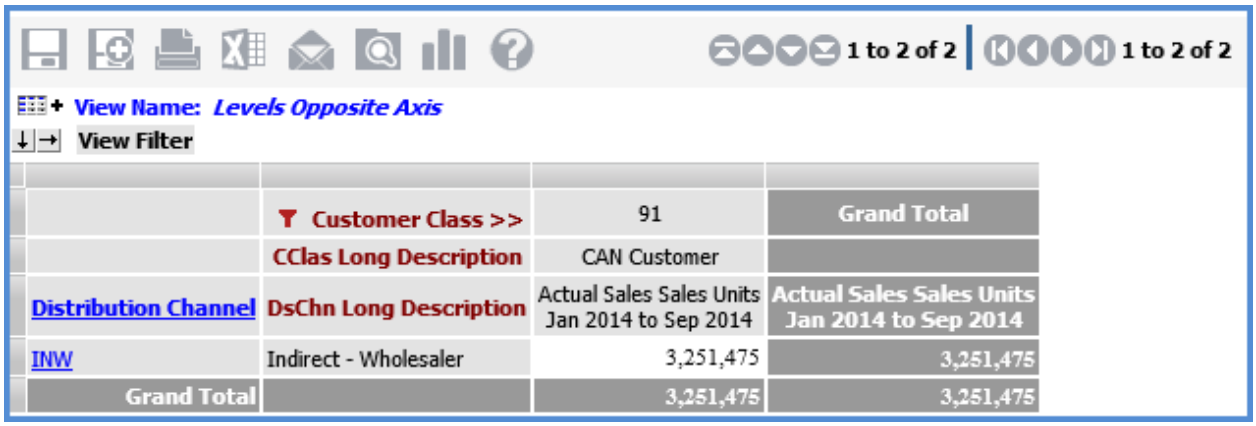
When a view has levels and measure items on the same axis, only members that have null data for all measure items will be removed by a Relationship and Empty Filter.

Level Filters and Relationship Filters

Relationship Filters on one axis will ignore level filters on the opposite axis when determining which members have related data. For example, this view has a filter on the Customer Class level in columns that returns class 91. Relationship Filter is enabled for rows and returns all Distribution Channels with YTD Sales Units. Once the Customer Class filter is applied, the result set may contain empty rows. In this case two distribution channels do not have any YTD Sales Units for Customer Class 91, but do have YTD Sales for another Customer Class. These empty rows could be removed by enabling the Empty Filter.



Here is the view after Empty Filter has been enabled on rows.



View Filters

The sequence in which filters are executed in relation to View Filters is View Filter first, then Relationship Filter, and then Empty Filter. Only data that meets the View Filter criteria will be considered by the Relationship Filter.

FAQ's

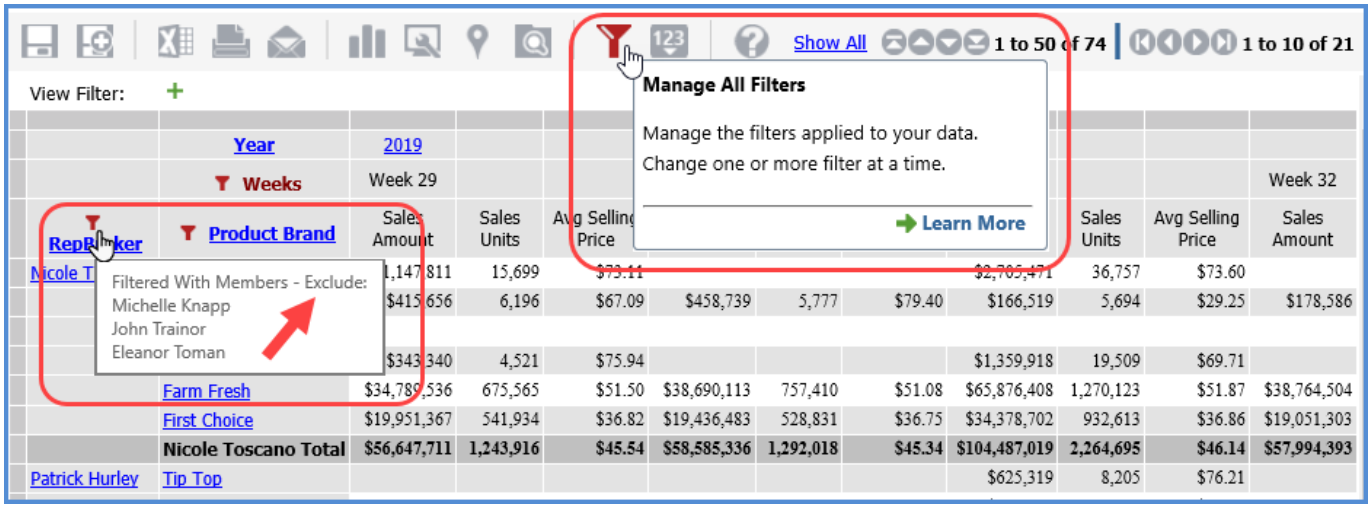
Can Measure Items with Conditional Formatting including Images and Indicators be included in a Filter?

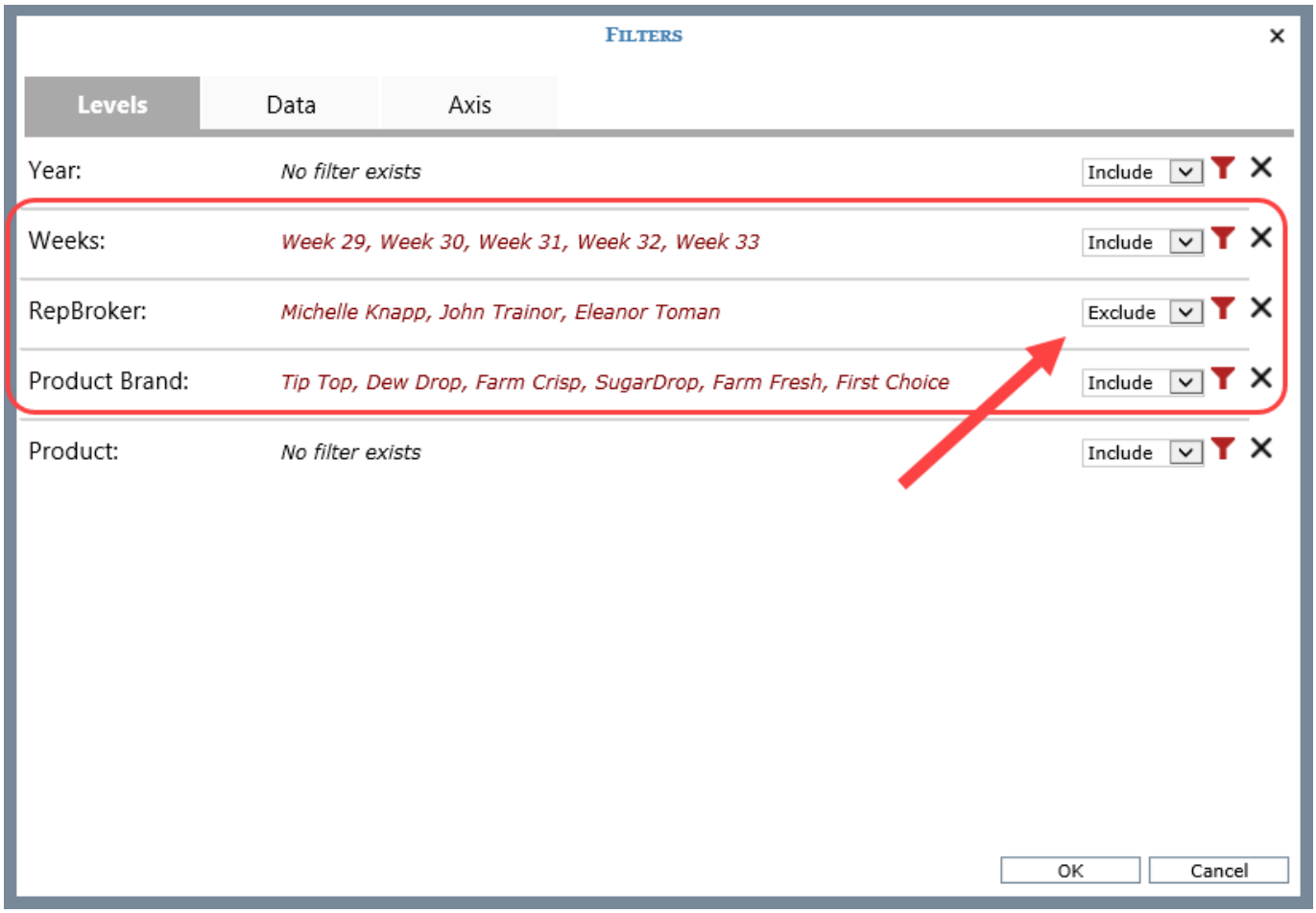
Yes. When a measure item with an associated image or indicator is filtered, only the value of the measure item is used in the filter. The image and indicator are ignored by the filter.

How Can I Tell If A Level Filter Includes Or Excludes Values?

There's a few ways to tell if a level filter is in the Include or Exclude mode. Two shortcuts are shown below. The label that displays when you hover over a filtered level in a view will include the text "Exclude" if it's an Exclude type filter. When it's an Include type filter, no qualifying text like that shows in the label.

Another shortcut is to look in the Filters window. The Include or Exclude status shows for every level.





What Does “Not Mapped” Mean in Views?

A row or column of “Not Mapped” data in a view means that measure item data exists for a period of time that has not been defined in Stratum Administration. Such measure item data is assigned to a “Not Mapped” member so you can still see the data in the view.

1 to 11 of 11 | 1 to

View Name: *Data Verification - Daily Sales*

View Filter

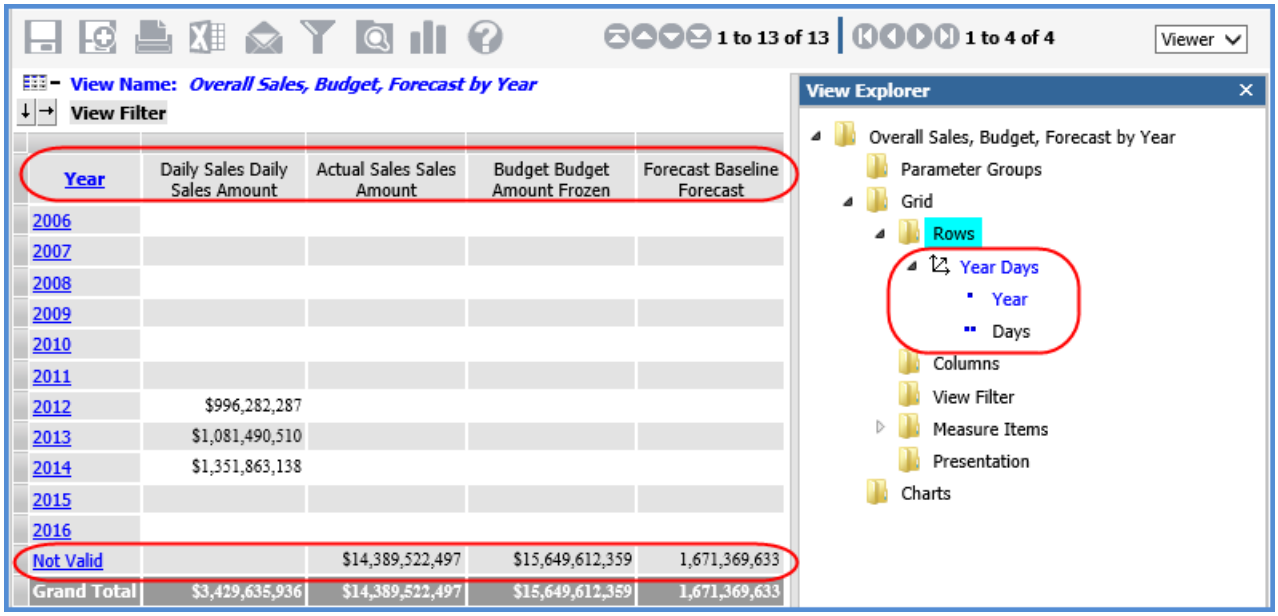
Year Based	Year Based Quarters Based-Year Based-Abs Year	Quarters Based	Daily Sales Daily Sales Amount	Daily Sales Daily Sales Units
Last Year	2015	2 Quarters Ago	$1,557,900	115,200
		Previous Qtr	$7,146,190	192,697
		Current Quarter	$509,721,493	538,659
		Not Mapped	$689,881	102,312
		Last Year Total	**$519,115,465**	**948,868**
Current Year	2016	2 Quarters Ago	$2,129,130	157,440
		Previous Qtr	$9,335,956	196,929
		Current Quarter		
		Not Mapped	$1,589,775	280,256
		Current Year Total	**$13,054,861**	**634,625**
Grand Total			**$532,170,326**	**1,583,494**

The view in the prior example has levels from Year Based Quarters on rows. Notice that each year has a “Not Mapped” row of Daily Sales data. This means that there are insufficient based quarter time periods defined in Stratum.Administration. In this example, an additional based quarter definition for a 3 Quarters Ago period needs to be defined in Stratum.Administration. After that, the previously unmapped data will be assigned to the 3 Quarters Ago period and display in the view for that member of Year Based. Here is the view after the period has been defined.

Year Based	Year Based Quarters Based-Year Based-Abs Year	Quarters Based	Daily Sales Daily Sales Amount	Daily Sales Daily Sales Units
Last Year	2015	3 Quarters Ago	$689,881	102,312
		2 Quarters Ago	$1,557,900	115,200
		Previous Qtr	$7,146,190	192,697
		Current Quarter	$509,721,493	538,659
		Last Year Total	**$519,115,465**	**948,868**
Current Year	2016	3 Quarters Ago	$1,589,775	280,256
		2 Quarters Ago	$2,129,130	157,440
		Previous Qtr	$9,335,956	196,929
		Current Quarter		
		Current Year Total	**$13,054,861**	**634,625**
Grand Total			**$532,170,326**	**1,583,494**

What Does “Not Valid” Mean in Views and Filter Windows?

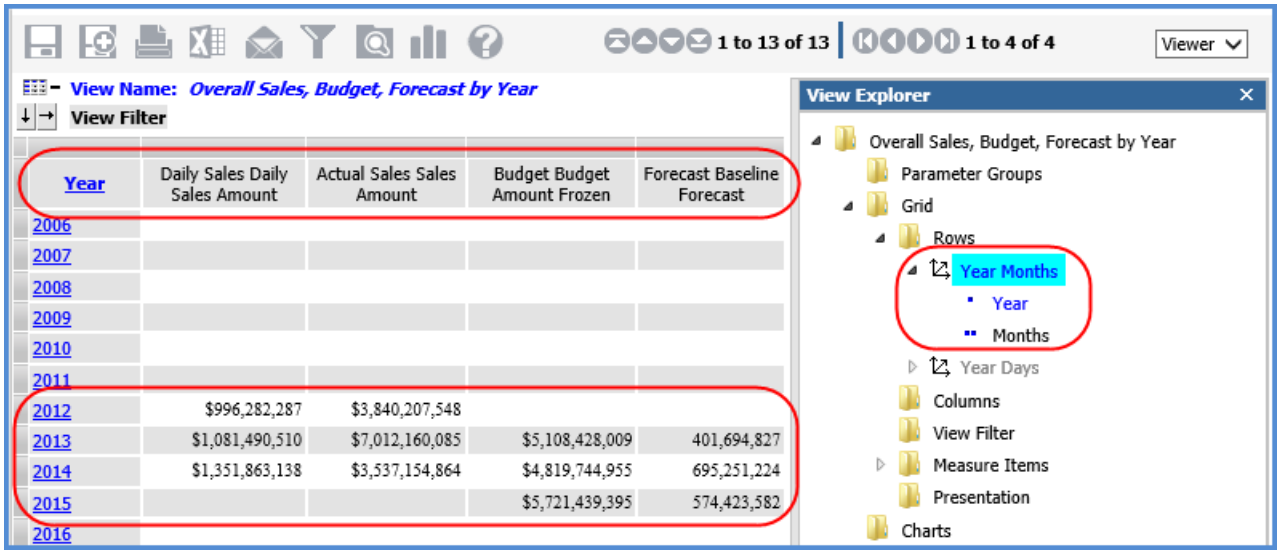
A row or column of “Not Valid” data in a view means that a time level in the view does not apply to some of the measure items in the view. Such measure items have their data assigned to the “Not Valid” member so you can still see their data in the view.



Year	Daily Sales Daily Sales Amount	Actual Sales Sales Amount	Budget Budget Amount Frozen	Forecast Baseline Forecast
2006				
2007				
2008				
2009				
2010				
2011				
2012	$996,282,287			
2013	$1,081,490,510			
2014	$1,351,863,138			
2015				
2016				
Not Valid		$14,389,522,497	$15,649,612,359	1,671,369,633
Grand Total	$3,429,635,936	$14,389,522,497	$15,649,612,359	1,671,369,633

The view in the prior example has levels from Year Days on rows. The levels are applicable to the Daily Sales measure item in the view. There is Daily Sales data for years 2012 through 2014. The Year Days levels are not valid for the other three measure items of Actual Sales, Budget, and Forecast. Data for those three measure items gets assigned to the “Not Valid” member for Year Days. The “Not Valid” member also will show up in related filtering windows for Year Days such as in the Select Members window.

Consider choosing a time dimension that is applicable to all measure items in the view. In the following example, using Year Months instead of Year Days eliminates the “Not Valid” row. Year Months is valid for all four measure items. Here is the updated view after changing the time dimension.



Year	Daily Sales Daily Sales Amount	Actual Sales Sales Amount	Budget Budget Amount Frozen	Forecast Baseline Forecast
2006				
2007				
2008				
2009				
2010				
2011				
2012	$996,282,287	$3,840,207,548		
2013	$1,081,490,510	$7,012,160,085	$5,108,428,009	401,694,827
2014	$1,351,863,138	$3,537,154,864	$4,819,744,955	695,251,224
2015			$5,721,439,395	574,423,582
2016				

Why can't I Access the Select Members Window?

This happens if administrative settings are set up such that only the Advanced Selected Members window is available for a level. Administrators may choose to set up the application that way for levels with a large number of members, for example, the Lot level. In such cases, the Simple Select option will not display when you click the More button in the Advanced Select Members window.

Why can't I Filter or Sort Cumulative Calculated Measure Items?

The results of a cumulative calculation are accumulating in nature; therefore, sorting and filtering functionality is not available on calculated measure items that use cumulative functions in their expression. Those functions include the Cumulative Total, Cumulative Percent of Total, ABC Cumulative, and ABC Cumulative Percent of Total functions.

- Sort and Filter options will not display on the pop-up menu of a calculated measure item that uses a cumulative function.
- Sort and Filter properties will be disabled in the Properties window for those measure items.
- Filtering those types of measure items will not be permitted when using the Data tab of the Filters window.
- If a non-cumulative calculated measure item has been sorted or filtered and you want to change it to a cumulative calculated measure item, you must first remove the sorting or filtering.

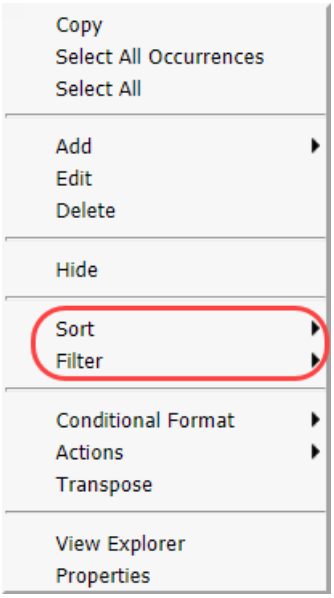
The view that follows shows an example of this scenario. The “Percent of Total” calculated measure item can be sorted and filtered because it does not perform a cumulative calculation. The “Cumulative % of Total” calculated measure item cannot be sorted and filtered.

View Name: *RepBroker Cumulative Sales*

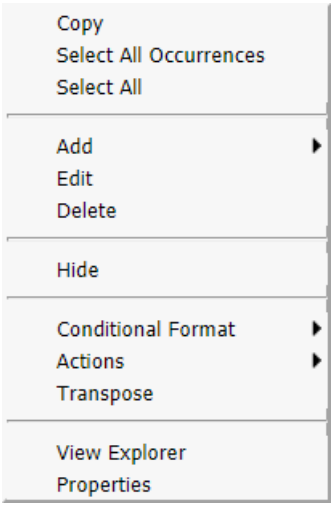
View Filter

RepBroker	Product Category	Actual Sales Jan 2014 to Sep 2014	Percent of Total	Cumulative % of Total
Mary Lopez	Frozen Fruit Products	$5,029,230	.90%	.90%
	Pork	$7,651,423	1.37%	2.27%
	Beef	$11,814,665	2.11%	4.38%
	Frozen Prepared Dinners	$15,690,970	2.81%	7.19%
	Fresh Fruit	$19,235,673	3.44%	10.63%
	Canned Fruit	$25,735,340	4.60%	15.23%
	Fresh Vegetables	$27,251,063	4.87%	20.11%
	Mary Lopez Total	**$112,408,366**		
Eleanor Toman	Frozen Fruit Products	$9,455,123	1.69%	21.80%
	Pork	$17,749,079	3.17%	24.97%
	Beef	$18,908,033	3.38%	28.36%
	Fresh Fruit	$32,031,428	5.73%	34.09%
	Frozen Prepared Dinners	$44,281,161	7.92%	42.01%
	Fresh Vegetables	$47,904,721	8.57%	50.58%
	Canned Fruit	$276,298,202	49.42%	100.00%
	Eleanor Toman Total	**$446,627,746**		
Grand Total		**$559,036,113**		

Here's the pop-up menu for Percent of Total, with the Sort and Filter options:



Here's the pop-up menu for Cumulative Percent of Total, without Sort and Filter options:



The “Percent of Total” calculated measure item in the next view has a Recursive Top Count filter applied to it. If you attempted to change the expression for “Percent of Total” to a cumulative percent of total, a message would display stating that you need to remove the filter before the cumulative function can be applied to the expression.

View Name: *RepBroker Cumulative Sales*

View Filter

Recursive Top Count 5

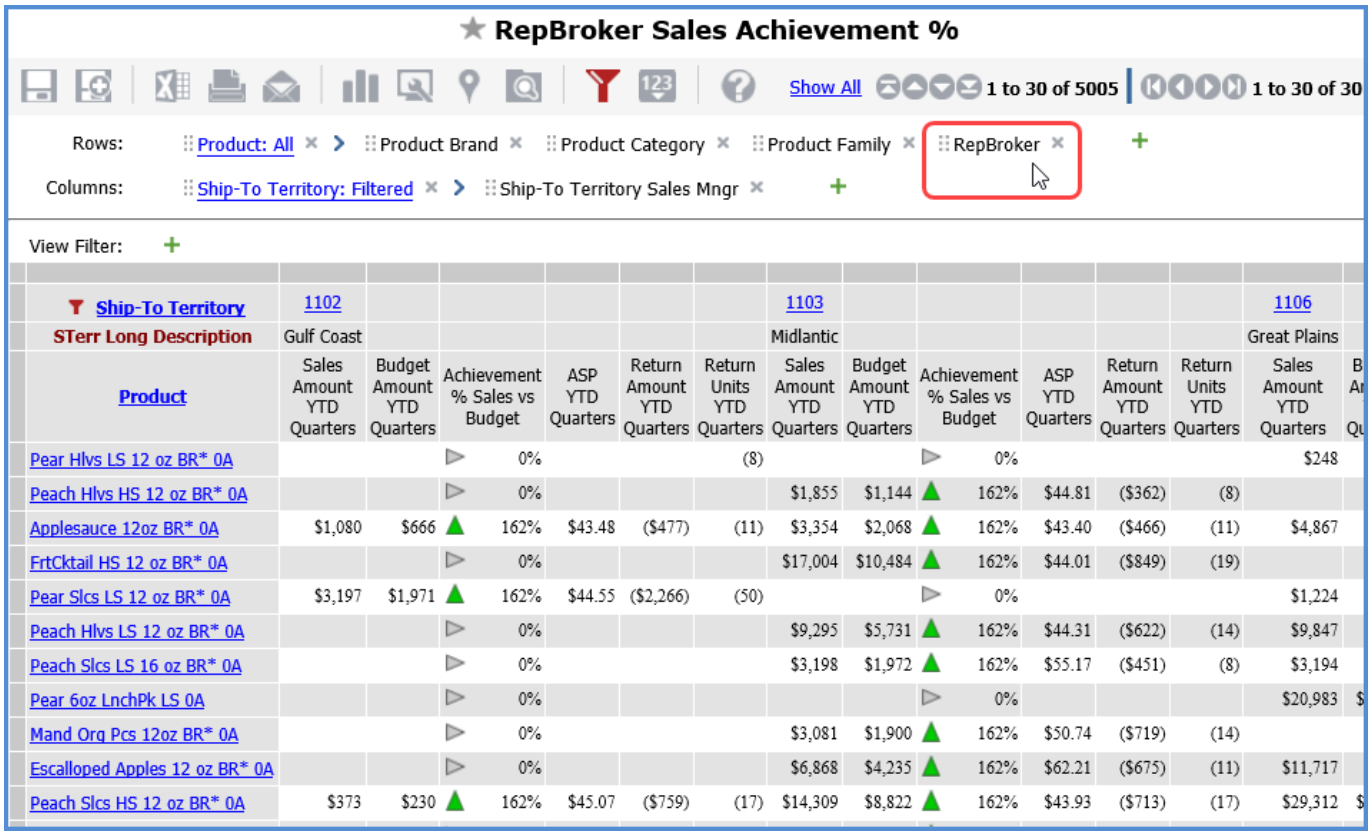
RepBroker	Product Category	Actual Sales Jan 2014 to Sep 2014	Percent of Total	Cumulative % of Total
Mary Lopez	Fresh Vegetables	$27,251,065	4.87%	6.37%
	Mary Lopez Total	**$27,251,065**		
Eleanor Toman	Fresh Fruit	$32,031,428	5.73%	13.86%
	Frozen Prepared Dinners	$44,281,161	7.92%	24.21%
	Fresh Vegetables	$47,904,721	8.57%	35.41%
	Canned Fruit	$276,298,202	49.42%	100.00%
	Eleanor Toman Total	**$400,515,511**		
Grand Total		**$427,766,577**		

Why Did a Level That I Filtered Get Moved to the View Filter Section of My View?

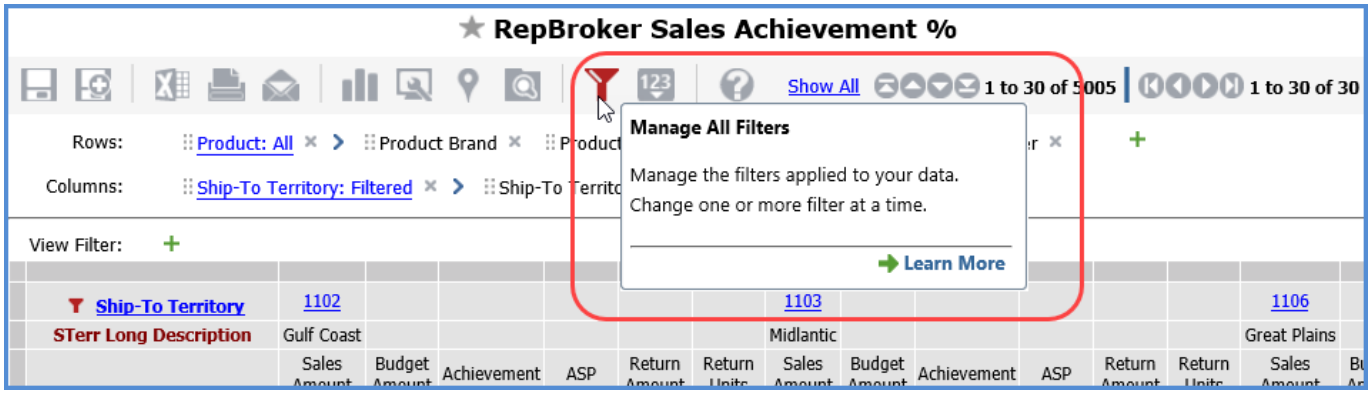
When you add a new filter to your view, the Filters window in Stratum.Viewer automatically moves that level to the View Filter section. An example follows.

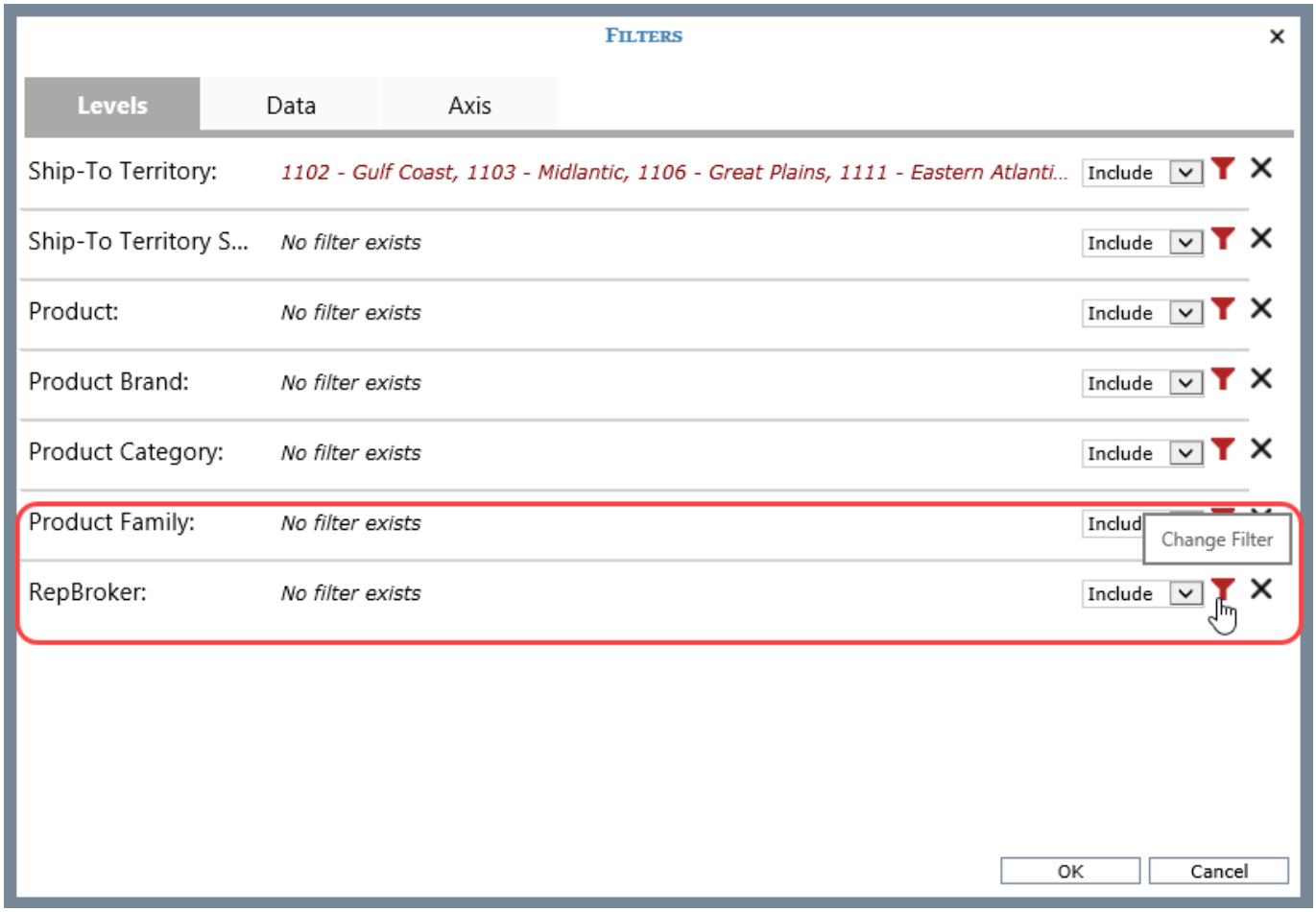
***Note:** If the level in question is the second level of a time hierarchy, the level is treated differently than what is described in this topic. See Treatment of Time-related Levels by the Filters Window.

In this view, the Product level currently displays and you can see other levels that are available to drill to in view explorer including RepBroker.

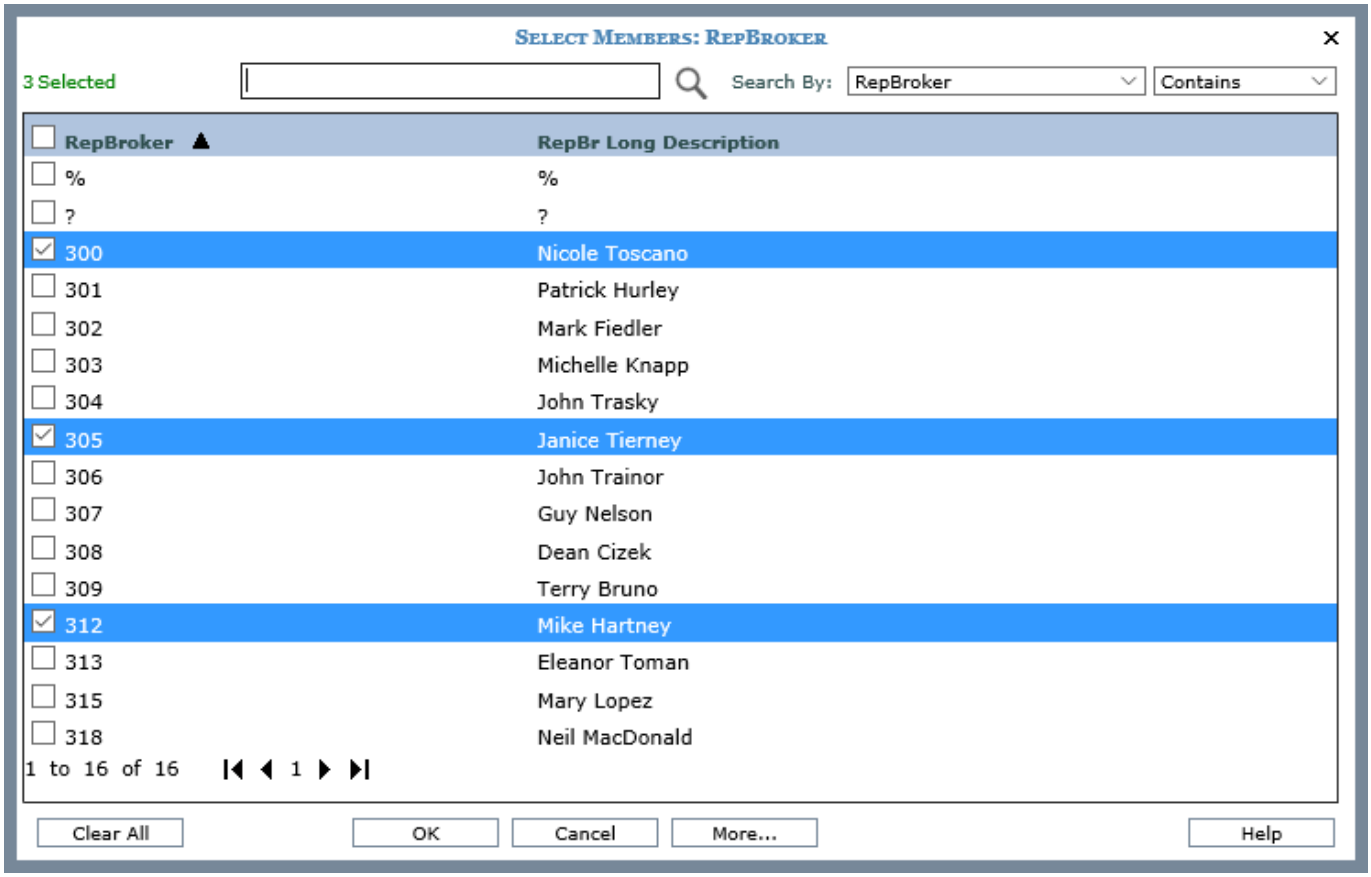


The Manage All Filters icon is clicked, and the Filters window shows all levels available (not hidden) for the view. The Change Filter icon is clicked for the RepBroker level.

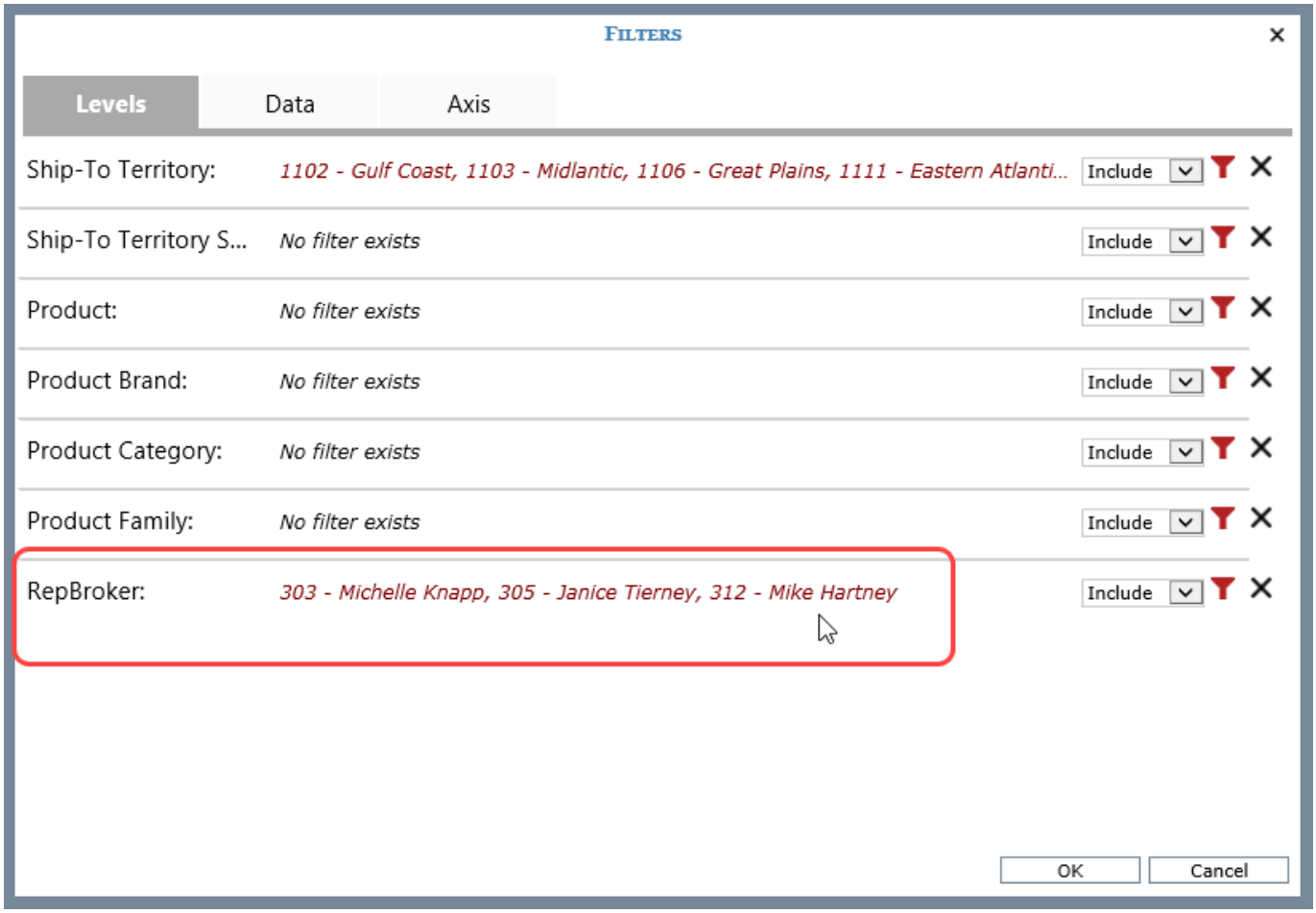



FILTERS
Levels
Data
Axis
Ship-To Territory:
1102 - Gulf Coast, 1103 - Midlantic, 1106 - Great Plains, 1111 - Eastern Atlanti...
Include
Ship-To Territory S...
No filter exists
Include
Product:
No filter exists
Include
Product Brand:
No filter exists
Include
Product Category:
No filter exists
Include
Product Family:
No filter exists
Change Filter
RepBroker:
No filter exists
Include
OK
Cancel

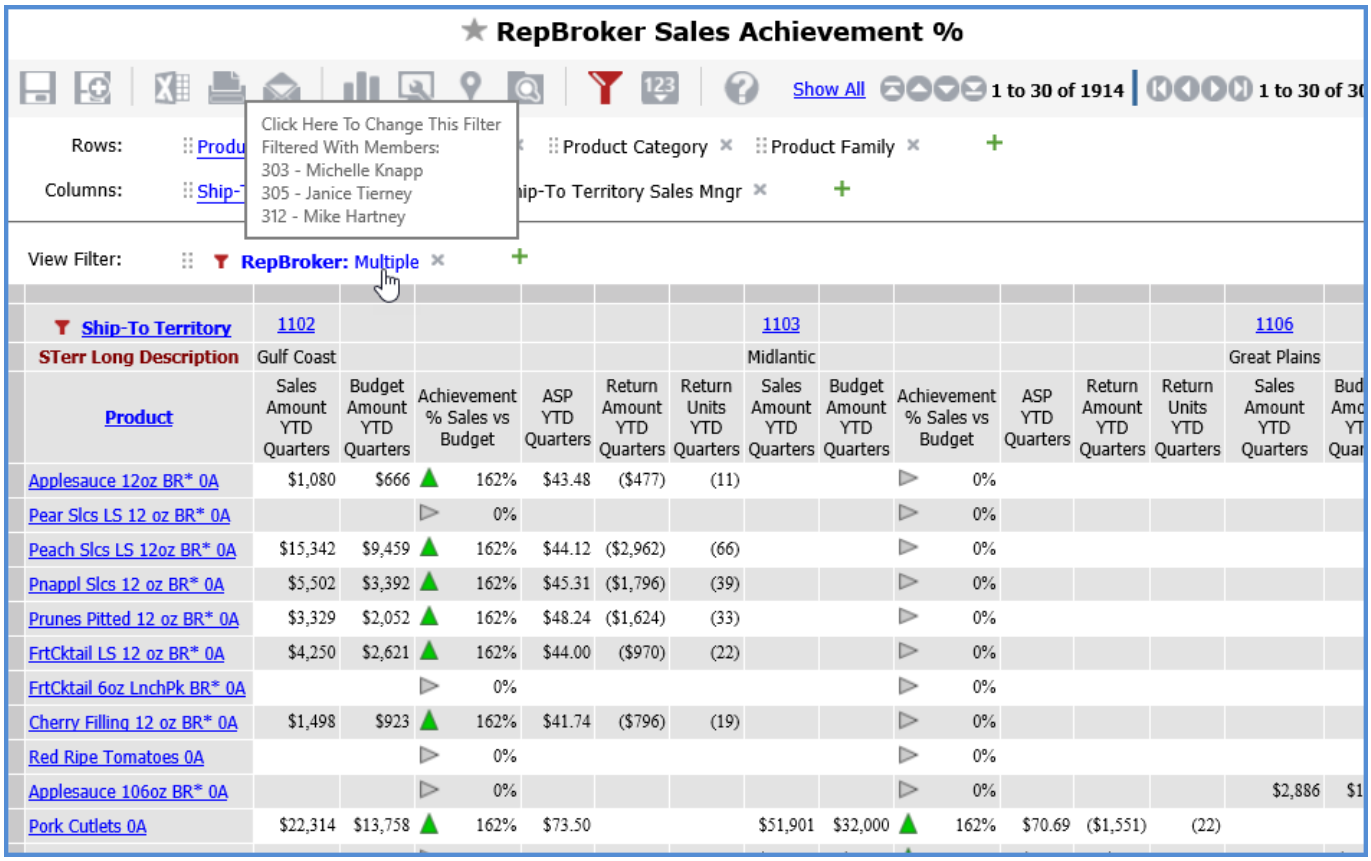
Three of the RepBrokers are selected, and OK is clicked in the Select Members window.



The Filters window displays the filter selections.



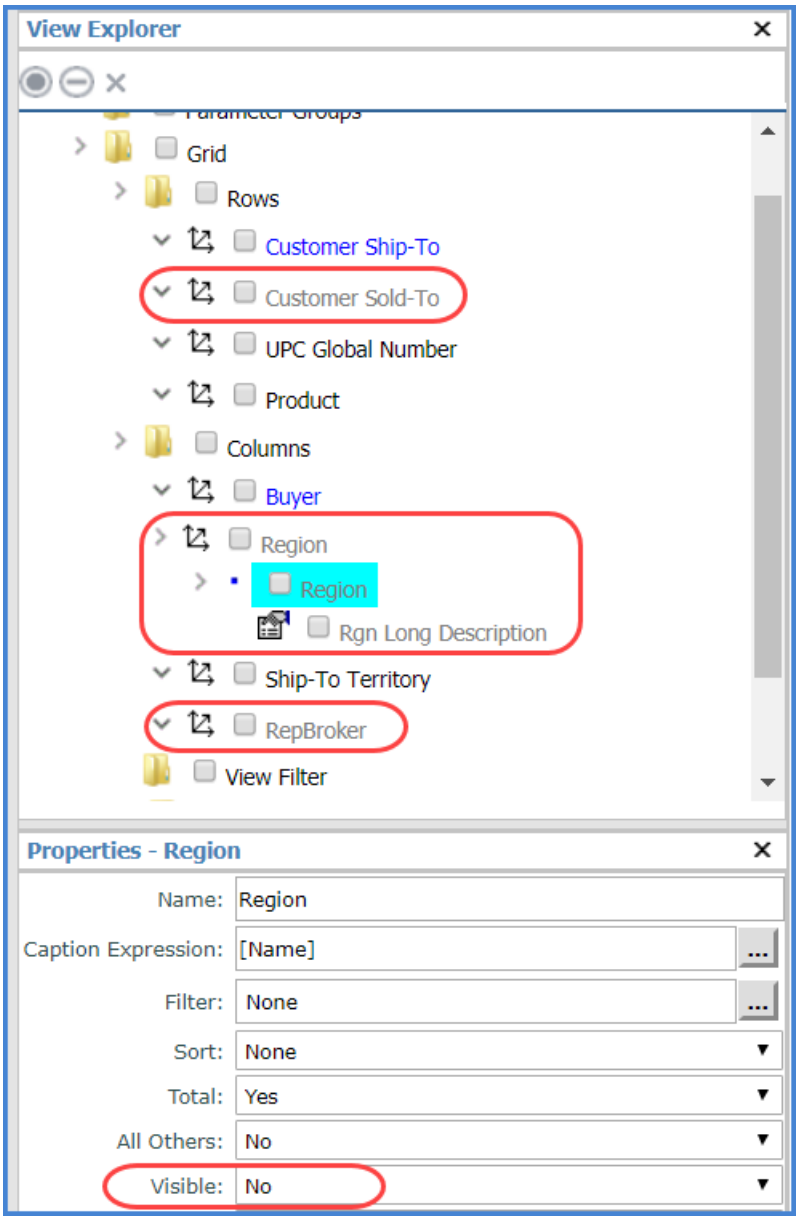
Clicking OK in that window refreshes the view. Notice that RepBroker has been moved to the View Filter section. The view is filtered by the three RepBrokers that were selected for the level.

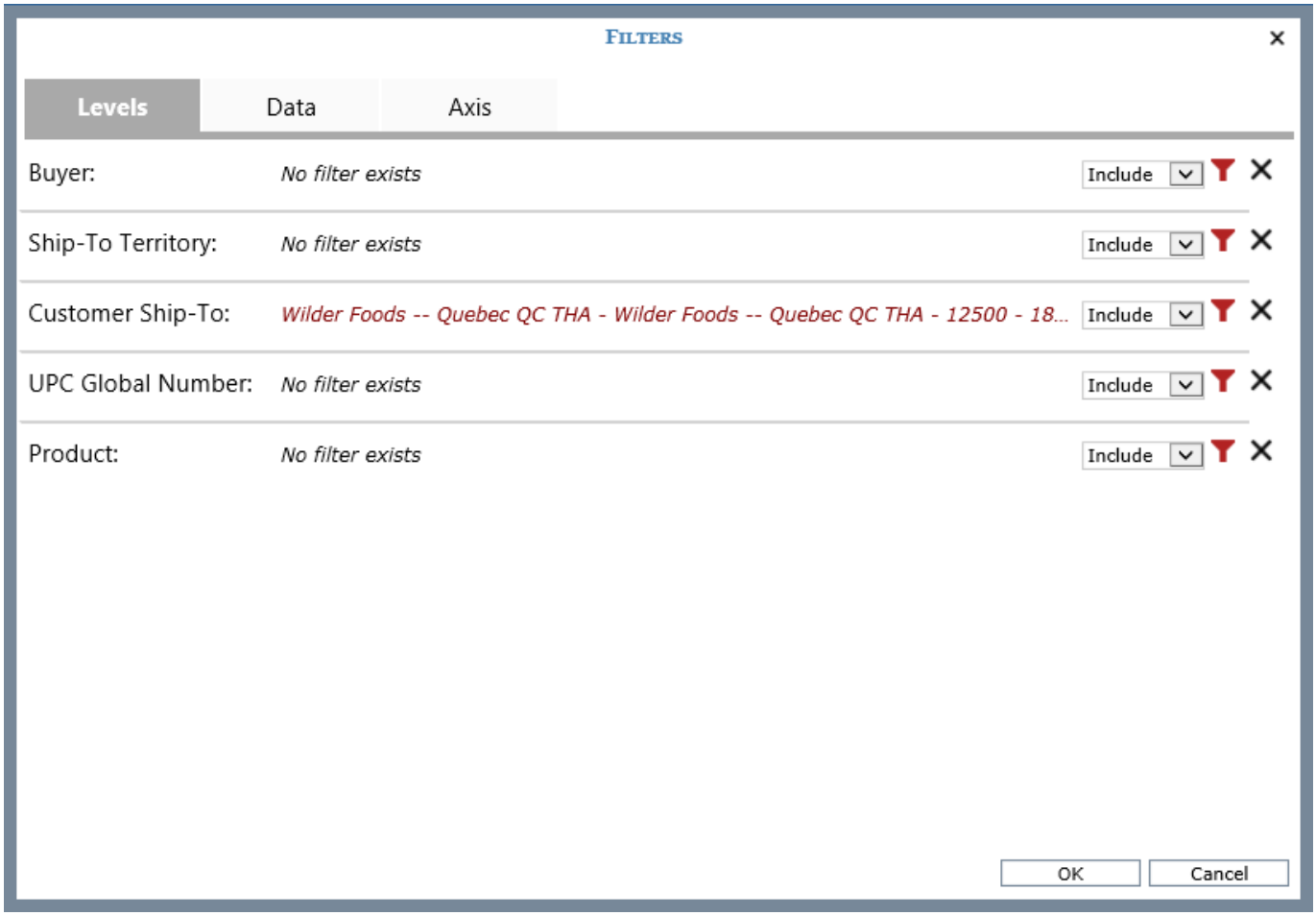


Ship-To Territory	1102						1103						1106	
STerr Long Description	Gulf Coast						Midlantic						Great Plains	
Product	Sales Amount YTD Quarters	Budget Amount YTD Quarters	Achievement % Sales vs Budget	ASP YTD Quarters	Return Amount YTD Quarters	Return Units YTD Quarters	Sales Amount YTD Quarters	Budget Amount YTD Quarters	Achievement % Sales vs Budget	ASP YTD Quarters	Return Amount YTD Quarters	Return Units YTD Quarters	Sales Amount YTD Quarters	Bud Amo YT Quar
Applesauce 12oz BR* 0A	$1,080	$666	162%	$43.48	($477)	(11)			0%					
Pear Slcs LS 12 oz BR* 0A			0%						0%					
Peach Slcs LS 12oz BR* 0A	$15,342	$9,459	162%	$44.12	($2,962)	(66)			0%					
Pnappl Slcs 12 oz BR* 0A	$5,502	$3,392	162%	$45.31	($1,796)	(39)			0%					
Prunes Pitted 12 oz BR* 0A	$3,329	$2,052	162%	$48.24	($1,624)	(33)			0%					
FrtCktail LS 12 oz BR* 0A	$4,250	$2,621	162%	$44.00	($970)	(22)			0%					
FrtCktail 6oz LnchPk BR* 0A			0%						0%					
Cherry Filling 12 oz BR* 0A	$1,498	$923	162%	$41.74	($796)	(19)			0%					
Red Ripe Tomatoes 0A			0%						0%					
Applesauce 106oz BR* 0A			0%						0%				$2,886	$1
Pork Cutlets 0A	$22,314	$13,758	162%	$73.50			$51,901	$32,000	162%	$70.69	($1,551)	(22)		

Why Doesn't a Level for a View Show in the Filters Window?

The Filters window only displays levels in a view that have their Visible property set to Yes. A level will not display in the window if it is defined as hidden (Visible = No). In the following example, three of the levels in the view are hidden including the Region level. The Filters window will display the five levels that are defined as visible, listing the levels that are on columns first followed by the levels on rows.




FILTERS
Levels
Data
Axis
Buyer:
No filter exists
Include
Ship-To Territory:
No filter exists
Include
Customer Ship-To:
Wilder Foods -- Quebec QC THA - Wilder Foods -- Quebec QC THA - 12500 - 18...
Include
UPC Global Number:
No filter exists
Include
Product:
No filter exists
Include
OK
Cancel

Why is a Filter Property Disabled?

This can happen when:

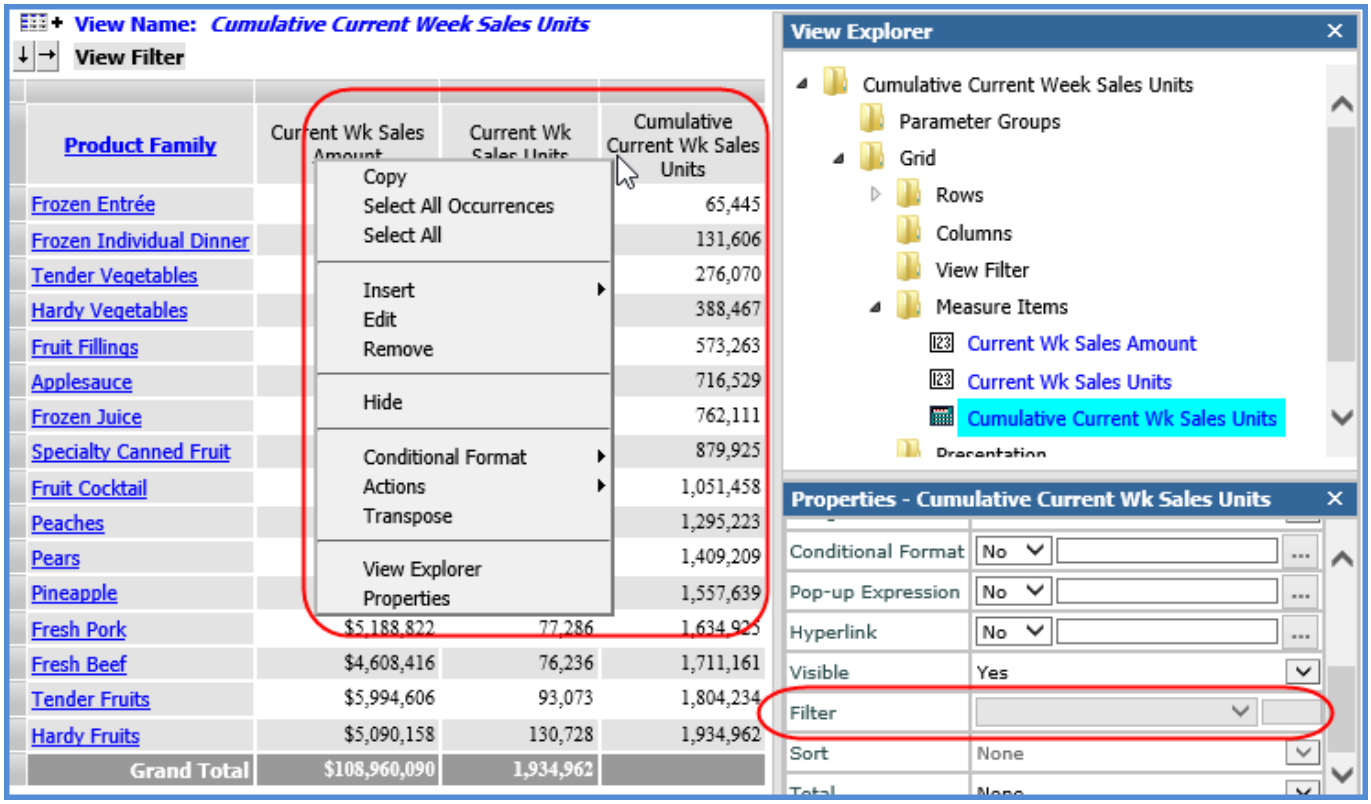
- You're a casual user.
- You're working with a cumulative calculated measure item.
- You're working with measure items and there are levels on the same axis as level items.
- You are trying to filter Grand Totals that are on the axis opposite from the measure item axis. See Guidelines for Sorting and Filtering on Totals.

Casual User

The grid pop-up menu for casual users does not have a Filter option on it. Casual users can however use the Filters window from the view toolbar to add filters or change existing ones. And they can edit existing filters by clicking the filter icon ▼ next to a filtered item in a view.

Cumulative Calculated Measure Item

Filtering is not permitted on calculated measure items that use cumulative functions in their expression. Those functions are the Cumulative Total, Cumulative Percent of Total, ABC Cumulative, and ABC Cumulative Percent of Total functions. The Filter option will not display on the grid pop-up menu of a calculated measure item that uses a cumulative function. Also, the Filter properties will always be disabled in the Properties window for those measure items.

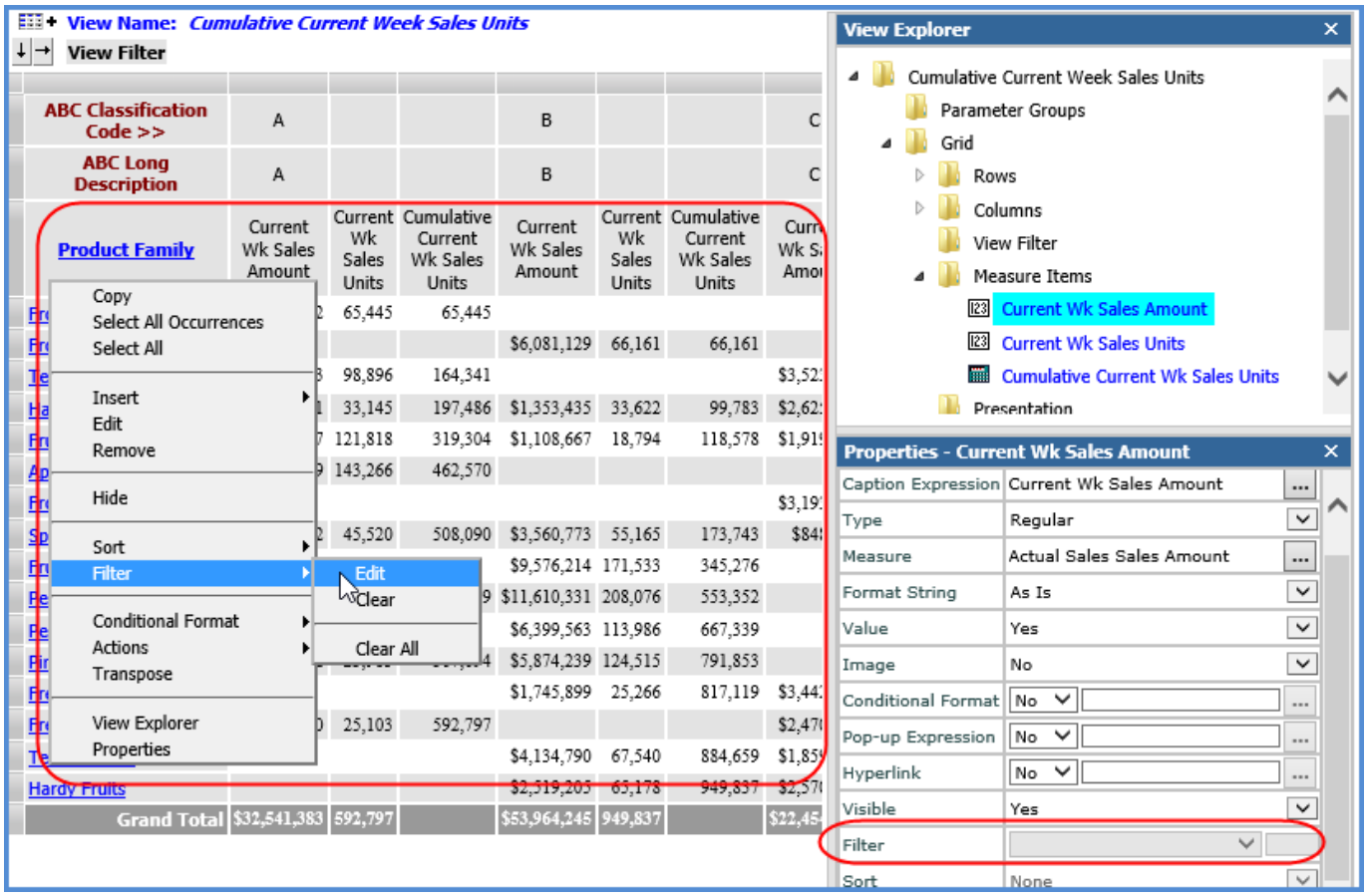


Levels on Same Axis as Measure Items

If there are levels on the same axis as the measure items, then Filter will be disabled in measure item Properties windows. You must first filter the measure item via the grid in relation to a particular level member on the measure item axis.

In this view, the measure items are on the columns axis and there is an ABC Classification Code level on columns. The Filter property is disabled in all measure item Properties windows. You can filter by right-clicking an instance of a measure item in the grid (for A, B, or C code) and using the Filter option on the pop-up menu.

After setting up the initial filter that way, the Filter properties will be enabled in the Properties window. You can then edit or remove the filter from the grid or Properties window.



Definitions

Axis Filter

Axis filters are a means of creating complex filters that contain more than one condition in their filter expression, joined by “and” or “or” statements. They are well suited for analysis that takes into account multiple business conditions. Use them when you need to set up filters involving multiple measure items or both measure items and attribute relationships. For example, you have a business need to see all rows of data for products that meet a certain sales goal but you also want to factor in another performance indicator such as a profit margin, rate of return, or average selling price. You use an axis filter with multiple conditions to zero in on the products of interest to you.

You can set up axis filters on the rows or columns axis. For example, use an axis filter to return all rows that fit the criteria of two different measure items -- such as all rows where Sales Units are greater than 1,000 and Profit Margin is less than 20%.

Display Column

Display columns provide descriptive information about objects displayed in Stratum.Viewer windows such as the View List and Select User List Filter windows. The display columns available vary by window and object type. Examples of display columns are the date a user list was created, an attribute relationship for a level member, and the owner of a view. You can determine which display columns show while using the Select Members, Advanced Select Members, User List, Member List, and Conditional Format windows.

View Filter

The View Filter acts as a filter on all visible levels and measure items in a view so that only data that meets View Filter criteria displays. A View Filter is applied no matter what levels are displayed in the view. See also Using a View Filter vs. a Level Filter.

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